



JOURNAL OF INDIAN SYSTEM OF MEDICINE



NAAC Accredited Grade 'A'

January-June, 2013

Volume 1, Number 1

ISSN- 2320- 4419



Official Publication of
**Mahatma Gandhi Ayurved College,
Hospital & Research Centre**
Datta Meghe Institute of Medical Sciences,
(Deemed University)
Sawangi (Meghe), Salod (H), Wardha- 442 004,
Maharashtra (India)



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(Declared as Deemed to be University under section 3 of the UGC Act 1956)

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CONTENTS

EDITORIAL			
Concept of Nature		A Short Study on Pharmaceutical Preparation & Clinical Evaluation of Phalavarti (Gudavarti) in Malavrodha (Constipation)	
Bharat Chouragade	1	Bharat Rathi	30
GUEST EDITORIAL			
Medical Pluralism and Integrated Medical Education		Anatomical Study Of Mūtravaha Srotasa with Special Reference To Mūtrakruhra	
Ram Harsh Singh,	3	Gaurav R. Sawarkar	35
REVIEW ARTICLE		BRIEF RESEARCH COMMUNICATIONS	
Yoga : An adjunct therapy to Spine Rehabilitation in Spinal Cord Injury Patients.		Concept of Physiology of Central Nervous System in Ayurveda.	
S. Shrivastva, R. Dulani, P. Singh		Alka Rawekar, Akshata Mulmule, Priyanka Gupta	38
N.K. Saxenea, Madhuri Wane,		The Concept of Severe Psychoses in Ayurveda	
Madhuri Dhore	6	Prakash B Behere, Sunder Singh Danga	40
Management of Cancer in Ayurveda		CASE REPORTS	
Kailash K. Singh	9	Pedunculated wart excision by Ksharsutra	
Prevention of Ageing		Kiran B. Khandare, Subhash Chandra Varshney	42
Sushil Kumar Nath.	12	Vitiligo and Ayurveda management	
Responsible Factors for Normal Delivery of Fully Grown Normal Foetus		Anuradha Khandekar, Sundersingh Danga	44
Neelam	14	CURRENT THEMES IN RESEARCH	
Yoga, The Equilibrium Between Mind and Body		Awareness about Information Technology: A necessity for Research in Ayurveda\	
Nilima N. Wadnerwar	16	Ashutosh kumar Pathak, H. H. Awasthi	46
Panchakarma – A scientific approach		DECRPTION OF DRAVYA	
Vaishali Kuchewar	19	Gum Guggulu- A herb in Ayurveda	
ORIGINAL ARTICLES		Meena S Deogade	48
Clinical study of Haridra and Kumari on episiotomy wound healing		INSTRUCTIONS TO AUTHOR	50
Vandana Rani, Mukta Sinha,	21		
A Clinical Study of Kasahar Kwath & Sadhyasnehpan in younger Children of Upper Respiratory Tract Infection.			
Renu Bharat Rathi	25		

Editorial

Concept of Nature

In the era of Science & Technology the world seems to outshine the nature and thinks of modifying it as per needs. This nature of human being to interfere nature has resulted in creation of appalling complex web in which he is trapped, resulting in development of various maladies. History speaks about the ancient sages, that with intuitive wisdom they thought of these problems not only for themselves but also for the entire universe¹. The solution they had given was in terms of Ayurved which essentially is the way of life & not mere a system of health. Needless to say it is perfect blend of Philosophy, Science, Mathematics, Astronomy, Morals & Ethics, and Spirituality².

Ayurveda has vision & mission which is global in character & thinks of world as one. Hence we felt it necessary to provide a platform to fetch an information round the globe so as to bring the holistic approach to these problems. Today the major concern is of LSD, which is creating Catastrophe for Humankind³. The eternal solution is not yet arrived at. The limitation in the field of Medical Science has now fascinated the consideration of the world to think in terms of holistic approach. The best answer to this problem is Ayurved, allied sciences & other therapies. This is the only science of ancient ages that has depicted, and adopted the Preventive Measures as the best practices rather than to cure the disease⁴.

The concept of imparting health to an individual & hence mankind as a whole in terms of Physical, Mental, Spiritual & Social Domain was revolutionary proposition which was given due recognition only in the twentieth century by WHO⁵.

The scope of research in every aspects of health now better known as paramedical sciences or measures has convinced the world that health should not be considered in isolation rather it is an integration of Physical, Mental, Spiritual & Social aspects, as man is a social animal.

The purport hence is conspicuous that a deep sense of percolation, of intuitive wisdom in various aspects needs to be assessed, verified, & applied to an individual so as to cater the need of health. It may be remember the best way to be healthy is to live with nature, understand it, because it gives the best indication as to where we are going or progressing? If we understand this, probably we may give the best solution. When one think of erasing or changing or modifying nature, it tries to buffer the change but if it exceeds the limit the nature responds to it by destroying it in mass.

So let us work together for the betterment of universe as one & let noble thoughts come from all directions to make universe an ideal dwelling place, wherein we will be able to achieve the four fold facets of life i.e Dharma, Artha, Kama, & Moksha⁶. The quest must be to explore the mystic power within so that it Magnify, Manifests & Glows in

its morphology – which is noticed by the others & initiates in him a sense of reverberations, this consolidates from practice and converts miseries in decisive contentment. The aura of celestial power is full of possibilities we need to identify, receive, and comprehend & apply them in the new form conducive to present era. This is the sole intension of bringing this **Journal of Indian System of Medicine**. I congratulate the authors, contributors for their kind favor in the form of their virtual experience which may prove eye opener for the others. We have to read beyond lines to get the nectar of hymns written years ago by Sages of inestimable wisdom & validate it in present situation for its relevance & rationale. We are bringing this introductory issue with a vision which will serve as a common platform for all researchers in alternative system of medicine.

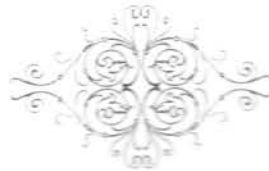
“Learn from yesterday live for today & hope for tomorrow”

Bharat Chouragade

Associate Prof.,
Department of Sanskrit, Samhita & Siddhanta
Mahatma Gandhi Ayurved College,
Hospital & Research Centre,
Salod (H), Wardha, Maharashtra
E-Mail :- cbharatc@gmail.com

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Medical Pluralism and Integrated Medical Education

Ram Harsh Singh,

Distinguished Professor, Faculty of Ayurveda,
Institute of Medical Sciences, Banaras Hindu University Varanasi 221005, India
Email :- rh_singh2001@yahoo.com

India is one of the most populous countries of the world, the majority located in rural areas. The economy is claimed to be improving but large proportion of the population is still below the poverty line and illiteracy is still a big issue. The health care sector is really in poor shape, although quality health care is available only for some but not for all because of cost barriers and other reasons inherent to Indian management system. Over two thirds of the population is dependent on traditional medicine practitioners and mainstream conventional medical care is not accessible for them. Modern medicine is still a medicine for few not for all. Health for All is still a dream. The doctor: population ratio is very low. Since independence Government of India has never placed health and education on priority for central support.

The Government spends only one percent of its GDP in health sector which is one fourth of the total expenditure on health in India. Thus health care and medical education are largely in private sector. This public fund spending on health care is really dismal as compared to developed countries which spend 10-15 percent of their GDP on health care. The share of Ayurveda and other official traditional systems of medicine in India is still more dismal, the current figures being less than Five percent of the total national health budget, 95 percent going to Allopathy. This huge gap is unjustified and is unwarranted. Because of such poor Governmental support the AYUSH systems have remained weak. India has over 250 Ayurvedic colleges producing over 12,000 graduates and 2,000 postgraduates in Ayurveda every year and we have about 5,00,000 registered practitioners. The central councils constituted through Acts of Parliament regulate the standards of education and registration of practitioners and promote research in AYUSH Systems on a modest scale.

It has been repeatedly experienced at many levels and suggestions have been made that the only way out from such a poor shape of Indian health care sector is to utilize the services of traditional systems of medicine and their man power with full heart through adequate mainstreaming. And in all such matters the only hope is the long awaited vision of integrated medical education and integrative medical practice in both, public as well as in private sectors based on which our neighbor country China has successfully managed its health care delivery system setting an example before the world which has also been patronized by WHO.

The Unique Features of Ayurveda

Inspite of being thousands of years old knowledge system,

Ayurveda is being rediscovered today and is liked by millions as the first option of health care. The main attractions seem to be its unique principles, its promise for safety, its green pharmacy and cost-effectiveness. The three important unique features of Ayurveda are: **1. Pronature, 2. Holistic, 3. Individualized care.**

1. In its entire approach Ayurveda is a pro-Nature system of health care. In Ayurvedic practice no diagnostic or therapeutic interventions are prescribed which may have anti-Nature impact because Ayurveda believes that our body-mind system is a miniature replica (microcosm) of the Nature (macrocosm) and therefore the health as well as the disease both are the products of the joint action of the two. The moment the microcosm is afflicted with a disease or disorder the Nature starts its protective actions for healing. The Ayurvedic theory of *Swabhaoparamvada* teaches us that the Nature and our own body are the first rank healers which are already helping the victim. The doctor-drug duo as external aides should assist the Nature, they should not interfere the ongoing natural healing process. This is why Ayurveda does not prescribe fast acting toxic medications and prefers nutraceuticals and soft medications in the treatment of a patient. In contrast the entire approach of western modern medicine is anti-Nature as is obvious from its medications like antibiotics, analgesics, anti-inflammatory, antipyretics, beta blockers, calcium channel blockers and so on. All the medications are designed to counteract the Nature's action with the ambition to overpower the Nature. Now gradually the modern science is also realizing the hollowness of its ambitions. Although antibiotics have helped many victims of fulminating infections but they have done much more harm. Now it is known that the healthy human body harbors over 30 Trillion nonpathogenic microbes on our body who help us with extremely useful symbiosis in the life process. The estimated number of these microbial cells is ten times more than our body cells, total weighing over 200 gms. This is called "Microbiome" which in fact is an important invisible organ of our body deserving all efforts of organ protection like any other organ of our body like liver, kidney, heart or brain. Scientists have argued that the concept of human genome should now be revised considering genome, epigenome and microbiome as a combined unit as all the three intimately interact together. The antibiotics and similar other chemical drugs heavily damage the "organ microbiome" and make us weak to take care of our day-to-day physiology and defense from all range of diseases. This is why Ayurveda teaches us to use minimum medication and put more emphasis on lifestyle management and dietary care. In

medications too we use soft medicines and nutraceuticals often drawn from the Green resource of the Nature. The Nature also warns us to prevent a disease rather than waiting to treat a disease when it has really emerged which may not be always easy. This is why Ayurveda while deliberating on its objectives emphatically states: "Swasthasya Swasthya Raksanam, Aturasya Vikara Prashamanam" (Charaka).

2. Ayurveda is essentially a Holistic and subjective science in contrast to conventional biomedical sciences which are critically reductionist boasting to be objective and scientific. The classics consider Ayurveda as Holistic because it considers life process in totality encompassing the body, the mind and the Soul all the three in one sweep. *Ayu* or life is a three dimensional entity comprising of body-mind-spirit as a continuum. Further the so conceived *Ayu* is in continuum with the universe of the Nature. This is the meaning of the Ayurvedic theory of *Loka-Purusaha Samyaie* microcosm-macrocosm continuum. On the other hand the so conceived holism also reflects on the holistic approach to diagnostics and medications practiced in Ayurveda. An Ayurvedic doctor diagnoses and treats his patients in totality encompassing promotion of health, prevention of disease and healing of his ailments not merely by drugs but through comprehensive life style management, dietary care and soft supportive medications wherever needed. Thus the entire intervention is comprehensively holistic in Nature and the entire strategy is "patient centered", not merely "disease centered" as is the case in Allopathy.

It is pertinent to mention here that holistic and subjective approach is the most scientific approach because the Nature itself is a complex and holistic phenomenon. It can be comprehended only through holistic subjective experience, not by mere study of parts and then to try to sum the parts to comprehend the whole. The whole is not merely the sum of the parts. The whole has its own entity. Thus the modern science too is holistic because science is nothing but a way to understand the Nature which is a holism. The difficulty comes at the level of technology and artificially designed methods of application of Science to decode its mysteries. Thus science is holistic, though modern technology is reductionist. There is a need to transform modern technology too into a holistic and pronature enterprise, then only one could understand the secrets of Nature in true sense. In the words of Nobel laureate BD Josephson the basic premise of modern bio-science and technology is to reduce the Reality/Nature into a measurable formula to suit the process of measurement. But the Reality/Nature is so complex that it cannot be truly reduced to a measurable formula. Hence most of the predictions of modern science are merely presumptions still to be proved by better science and subjective experience which was the approach of ancient Hindu scientists of India.

3. Individualized or personalized health care is another important feature of classical Ayurveda. Ayurveda is practiced on the principle of specificity of *Prakriti* and *Vikriti*. Every patient has his own genetically determined *Prakriti* or Constitution. So also every

disease has also its specific *Prakriti ie Dosh-Dusya-Adhistan* pattern which is to be addressed during the curative treatment. The *Deha Prakriti* may be modified to a limited extent in its epigenomic dimensions but cannot be changed fundamentally in one life time. In view of such features each patient is a separate entity and needs to be treated individually. Ayurveda does not prescribe the same treatment to all patients suffering from a particular disease as is often done in Allopathy. The current trends show that conventional modern medicine is also now gradually converging towards this age-old approach of individualized health care advocated by Ayurvedic classics – *Purusham Purusham Viksya* (Charaka). In the opinion of many activists in the field of genomic medicine Allopathy is not a full science, it is only a half science till it develops its real individualized health care strategy. If so Ayurveda is the only full science at least in its theoretical understanding. There is an urgent need to generate new scientific evidence for it. The followings are the main distinctions between the two streams of medicine.

Ayurvedic Medicine	Modern Medicine
Holistic Approach	Reductionist Approach
Pro nature Approach	Not necessarily
Individualized Patient Care	Generic Disease Care
Inclusive cause-effect relation	Narrow cause -effect relation
Body-Mind-Spirit Integrative	Non-Integrative
Life and Health Oriented	Disease Oriented
Patient Centric	Disease Centric
Diet and Life style Oriented	Drug, Surgery Oriented
Emphasis on Promotive and Preventive Care	Emphasis Curative Care
High Safety with minimal side effects	May be Unsafe due to side effects
Soft Nutraceutical Medication	Sharp Pharmac eutical Medication
Cost effective	Unsustainable high cost

Transforming the Mainstream Medicine through Integration

The main stream of medicine and medical practice is standing on cross roads today. The newer developments in basic science and medicine have heavily challenged the very basis of biomedical sciences. The fundamental transition of basic sciences from classical Newtonian physics to modern physics warrants rapid transformation of biosciences in tune with the new science which has not yet happened. Many scholars believe that conventional biology and medicine are still governed by Newtonian understanding shrouded with dualities of narrow cause and effect relationship, while Ayurveda is already based on its own philosophy which has obvious Quantum logic and is in tune with

modern physics. Similarly with the growing knowledge-base in the field of genome-epigenome-microbiome phenomenon the existing understanding of physiology, pathology and pharmacology as practiced today in modern medicine are fast losing their ground and if science grows in the same direction, all that is being done today in medicine will go in the realm of history to be replaced by the new science. Thus now there is a need to break all boundaries of science and allow free interaction and integration of knowledge systems returning back to the Mother Nature again.

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Yoga : An adjunct therapy to Spine Rehabilitation in Spinal Cord Injury Patients

Dr. S. Shrivastava, R.Dulani ,P.Singh, N.K.Saxena,Madhuri Wane,
Madhuri Dhore Department of Orthopaedics , JNMC, Sawangi Meghe (Wardha)
Email :- drsandeepshrivastava@yahoo.com

Abstract

Spinal Cord injuries are a disabling and morbid condition leading to tremendous changes in an individual's life. The National spinal cord injury database NSCID provide information more than 22,000 individual who sustained traumatic SCIS followed by falls (19.6%), act of violence (17.8%), sport injury (10.7%) & other etiologies (6.3%). Yoga essentially imparts a positive state of mind. This study is undertaken to find out the effectiveness of yoga therapy as an adjunct to spine rehabilitation in spinal cord injury Patients. This adjunct therapy to Spinal Cord injury patients strengthens an individual's immune system and heals thoroughly and gives long lasting effect. And enable a more integrated approach in rehabilitation through positive health. Yogic way will awaken the physical potential and lead the patient to live with a strong dynamic existence.

Key Words : Yoga, Spinal Cord Injury

Introduction :

Spinal Cord injuries are a disabling and morbid condition leading to tremendous changes in an individual's life. It causes not only the physical trauma but psychosocial distress.

It is estimated that approximately 11,000 new cases of Spinal Cord Injury (SCI) occur in United States annually. The National spinal cord injury database NSCID provide information more than 22,000 individual who sustained traumatic SCIS followed by falls (19.6%), act of violence (17.8%), sport injury (10.7%) & other etiologies (6.3%).

In spite of recent medical advances in treatment, patients with spinal cord injury land up with long term complications and prolong period of hospitalization. The quality of life declines in physical, psychological, social & occupational areas and appropriate Quality Of Life outcome is a major challenge of rehabilitation programs.

Spinal rehabilitation is the discipline of medicine that guides in improving functional outcome of patient & reintegration into society.

Yoga essentially imparts a positive state of mind. Apart from various treatment approaches, yoga as a addition to such spinal cord injury treatments, imparts the power of positive health comprising of physical, mental, social and spiritual dimensions. (Ref.1,2)

Aim and Objective:

This study is undertaken to find out the effectiveness of yoga therapy as an adjunct to spine rehabilitation in spinal cord injury Patients, specially pertaining to the perception of such Patients regarding improvement in their quality of life.

Research Methodology :

This is a prospective case study with single group Pre test & Post test was the research design of the study with yoga as independent variable and Quality of life , vital signs, impairment and function were dependent variable. It will generate level IV evidence.

Method & Material :

It was undertaken at Dept. Of Orthopaedics , A.V.B.R.H, Sawangi (Meghe), Wardha during the period of 1st January 2010 to 31st July 2012. It included the patients who came with Spinal cord injury, consented to enroll in the yoga program and were assessed by author no. 2 to be safe for undergoing Yoga Therapy, with following inclusion and exclusion criteria.

Inclusion criteria

- Patients of age group 18 yrs & above.
- Patient referred in Rehabilitation Phase of treatment phase.
- Patients who participated in atleast 10 sessions.

Exclusion Criteria :

Acutely injured patients with unstable injuries.

The Yoga session were conducted by an independent yoga constructor. Yoga in the form of Pranayam, Meditation, Savasana (corpse pose), Makarasana (the crocodile pose), Sarpasana (the snake pose) were carried out The Patients participated to the extent they were capable of. But they all participated in meditation process. Each session was of 45 minutes duration and was conducted 6 days a week early in the morning.

Pretest and Posttest level of functioning was assessed in the following format.

- FIM scoring to assess level of function.
- ASIA scale for looking impairment.
- Researcher prepared Pre yoga and Post yoga Questionnaire
- Vital parameters including temp, B.P, Pulse etc.

Pre & post yoga vital parameters were checked.

The treatment of yoga therapy was given one month continuously and was ensured continuation during follow-ups every 6 weeks during period of study.

Observations & Results :

Total of 112 Patients reported with spinal cord injuries, out of which 72 were initially recruited .Out of these 72 , 57 who received the yoga therapy for minimum duration and could be followed up for atleast 6 months are considered. Out of these 57 , 43 were males and 12 were females. The mean age was 42.6 yrs with minimum being 19 yrs and maximum being 62 years.

Pre yoga descriptions of sample

Out of 57 patient 17 patients initially refused to start with yoga therapy because of depression.50 patients were worried about disease. 29 patients were having insomnia, and 20 patients were having irritability & anxiety, 10 were had feeling of guilt (mostly as they were the sole earner of their family and held themselves responsible for suffering of family)

40 (70%) patients were dependent in self care activities including eating, grooming, bathing and dressing.

45 (80%) patient lost their bladder and bowel control.

51 (90%) patients had difficulty in Transfer.

40 (70%) patient were having problem with Locomotion.

10 patients were having raised blood pressure and bradycardia.

The entire patients were having good communication & Social Cognition.

The entire patients were having poor (mean 64) FIM scoring due physical & mental weakness and they could not perform their ADL and were dependent on other

Post Yoga finding

Out of 17 patients who refused to start with yoga therapy initially, 10 patient started yoga willingly after pursued by the Yoga instructor regarding no risk and benefits discussion. The Other 7 patient motivated themselves by seeing other doing yoga and them discussing the benefits arising out of the same. The entire group of patients used to do yoga regularly & used to enthusiastically wait for it.

In addition Patient's relatives who were having stressed also participated along with

them thus forming a "Yoga-Group" was also performed. At the end 92 % Patients have shown positive attitude towards disease,

53% patient could reduce their anxiety and depression.

49% patient found increase in attention and concentration.

51% patient showed happiness and were more Energetic.

30% patients improved in self care activities.

50% achieved sphincter control,

20% patients changed in transfers like bed to wheelchairs, wheelchair to toilet, etc.

20% patients improved in Locomotion and could walk with walker.

There was dramatically improvement in the FIM scoring and mean was 112 and ASIA scoring also improved by atleast 1 grade in all patients who has some signs of motor preservations previously

There was no significant change in vital parameters.

Maximum Patients found they were more energetic and participated in rehabilitation program actively.

Increased positive attitude and feeling of happiness was the great achievement among all the efforts.

Discussion:

There are many studies which have demonstrated categorically the benefits of Yogic practices in health care , psychosocial status and more so in spinal disorders such as low back aches etc^{1,2,3}

But we could not find any study wherein Yoga as an adjunct to spine rehabilitation program has been conducted in spinal cord injury Patients. One of the major problems encountered in the rehabilitation of spinal cord Patients is that there is huge reluctance on the part of patient to participate actively in the rehabilitation program .This mainly due to the mindset that after surgery if there is no immediate benefit than nothing can help them further.

Yoga as an adjunct to the rehabilitation helps to strengthen their mind set very positively^{4,5} and prepared them for being more receptive towards such rehabilitation approaches including learning of self-care. This change in mind set is attributable to the meditation exercises leading to the increase in self- belief and improving their overall quality of life by making them feel more enthusiastic and positive. In addition breathing exercise performed during yoga also adds to their physical endurances and making them less vulnerable to complications such as bed sores and pneumonia. In our study none of the patient had these complications. Yoga also helped them to improve their alertness and balances^{4,5,6}. Perhaps this attributed to their overall confidence levels as demonstrated by their improved capabilities sin self –transfer and locomotion abilities and overall improved FIM and ASIA scores.

Conclusion:

Yoga is not to stand on one's head but it is instead to stand firmly on one's feet & face life with all its pressures and problems, stresses and tensions, worries with courage, consistency and compatibility.

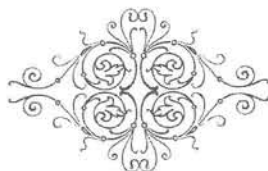
This adjunct therapy to Spinal Cord injury patients strengthens an individual's immune system and heals thoroughly & gives long lasting effect. And enable a more integrated approach in rehabilitation through positive health. Yogic way will awaken the physical potential & lead the patient to live with a strong dynamic existence.

Limitation :

More controlled and randomized studies have to be undertaken to assess the benefits of Yoga as an adjunct Therapy to spinal rehabilitation in spinal cord injured Patients.

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Management of cancer in Ayurveda

Kailash K. Singh,

**Professor and Head, Dept. of Radiotherapy and Oncology,
Rural Medical College & Pravara Rural Hospital, Loni, Dist. Ahmednagar, Maharashtra, India
Email :- drkksingh61@gmail.com**

Abstract

Cancer has largely remained incurable due to its complexity and its ability to spread rapidly and uncontrollably. It is a condition in which our own body cells turn hostile. Cancer usually spreads very fast and a patient can meet death in less than one year. Therefore, remedial measures need to be undertaken as soon as cancer is detected in the body. Various remedies available for cancer either try to put a check on the duplicating process of the mutant cells at genetic level or kill the entire collection of affected cells. The process, whether done chemically or through radiation, always runs the risk of affecting the neighbouring normal cells.

Keywords: Cancer, Ayurveda, Radiation, Chemotherapy.

Introduction :

Cancer is one of the most dreaded diseases of the 20th century and spreading further with continuance and increasing incidence in 21st century. Ayurveda, a traditional Indian medicine of plant drugs has been successful from very early times in using these natural drugs and preventing or suppressing various tumours using various lines of treatment.[1] The broad aim of this article is to provide a general out-line on descriptions of cancers and their management from an ayurvedic practitioners' perspective underlying its scientific principles involved in treating these conditions with the use of natural products. This article reviews the available literature regarding researches on anti-cancerous ayurvedic herbs and also includes a summary of treatment strategies for various cancers. It is written with an intention to raise awareness and encourage implementation of ayurvedic therapies for combating cancer and suggesting an integrated approach in tumour management and treatment.

Historical Perspective :

The word 'cancer' may be new to the 5,000 year old Indian system of medicine, Ayurveda, which relies on natural substances for healing. But ancient Ayurvedic classics are aware of the clinical features, resembling cancer, with the names such as Apachi, Gulma, Granthi, and Arbuda. The identification and description of malignant diseases are available in the literature of ancient India and Ayurveda. The earliest and for most records are cited in Atharva Veda (2200 B.C.). During this period the disease was probably described under the heading of apachi or apachit, which refers to the present knowledge of various types of lymph node swellings. In later period, Susruta (800 B.C.), in his classic "Sushrut Samhita" described this apachi as multiple lymph node swellings that may arise at different places such as the neck,

axilla and groin. In classical texts of Ayurveda- "arbuda – a type of swelling" has been described extensively under the chapter Apachi. According to Susruta, Swellings, which are globular, fixed, large and deeply-seated, slow growing, little painful, non suppurative and appear like a fleshy mass, called arbuda. It may arise in any part of the body due to derangement of muscle vitiated by tridosha. The word arbuda has been derived from the root "Arb" with Suffix "Ena" along with augmentation of "Nd" which means "to destroy". Grammatically, it denotes the fleshy out growths. During the vedic period arbuda was considered as a serpent like demon that was conquered by "Lord Indra". Whereas the literary meaning of arbuda is a lump or a mass or a polyp.[2]

Ayurvedic concept of cancer

Charaka [3] and Sushruta [4] samhitas, two well-known Ayurvedic classics, describe cancer as inflammatory or non-inflammatory swelling and mention them as either Granthi (minor neoplasm) or Arbuda (major neoplasm). Ayurvedic literature defines three body-control systems, viz., the nervous system (Vata or air), the venous system (Pitta or fire), and the arterial system (Kapha or water) which mutually coordinate to perform the normal function of the body. In benign neoplasm (Vataja, Pittaja or Kaphaja) one or two of the three bodily systems are out of control and is not too harmful because the body is still trying to coordinate among these systems. Malignant tumours (Tridosaja) are very harmful because all the three major bodily systems lose mutual coordination and thus cannot prevent tissue damage, resulting in a deadly morbid condition [4].

What Ayurveda Can Do

The excruciating experience of dying cancer patients can be ameliorated by making use of Ayurvedic principles. Ayurveda can be helpful in the management of cancer in many ways such as-

prophylactic, palliative, curative and supportive. Ayurvedic medicines help to improve the quality of life of the patients as listed below:[5]

- (1) Ayurvedic preparations can act as an adjuvant or a co-therapy along with chemotherapy or radiotherapy. It is also helpful in post-surgery care.
- (2) Ayurvedic medicines help to minimise the side effects of these therapies.
- (3) Ayurveda helps in reducing the therapeutic dose of the various drugs used as proved in some studies using cow urine.
- (4) They can be helpful in targeting the specific tissues as shown in some allopathic studies on nano-particles of gold.
- (5) Ayurvedic preparations help to slow the progress of cancer in cases where chemotherapy, radiotherapy or surgery is contra-indicated, due to some reasons and patients have no other choice.
- (6) Some Ayurvedic preparations can fight against tumours.
- (7) The cell-protective activity of drugs prescribed in Rasayana therapy helps to improve comfort and the quality of life of individuals with cancer.

Killing the cell" is the theory of modern science for the treatment of cancer, in which surgery, radiotherapy and chemotherapy is suggested. It is observed that when surgery takes place or biopsies are taken, the multiplication of cancer cells increased a lot. Consequently the size of cancerous tumor also increases. That is why people are scared about biopsy also. Radiotherapy means X-rays and gamma rays are generally used to burn the residual part of cancer after surgery. Generally this takes 21 days of time. If any single cancer cell remains untouched, it has the capacity to multiply at a fast rate. Due to the effect of radiation the immunity of surrounding healthy cells decreases. So, they are prone to develop cancer. That is why the possibility of metastasis and recurrence increases. Similarly specialized toxic medicines are used in chemotherapy which stops all the cell division either normal or cancerous. Patient is asymptomatic for some days with some relief but it has many side effects, it recurs and metastasis in many parts of the body.[6]

Side effects of chemotherapy and radiotherapy

- * Vomiting, nausea
- * Dehydration
- * Mouth ulcer with pain
- * Loss of appetite
- * Gastric Ulcer
- * Loss of body hairs
- * Skin reaction
- * Severe weakness
- * Severely low immunity
- * Anaemia
- * Renal toxicity
- * Cardiac problem
- * Hepatic insufficiency

Treatment of cancer through Ayurveda

Treatment of Ayurveda is based on Rejuvenate the cell theory, which works at DNA level. It means cancerous cell will rejuvenate into normal healthy cell. For this, first of all we have to understand why cancer occurs? According to evolution theory, when ecological factor of any animal is changed to the extent that animal cannot survive any more, then they develop a tendency to change his form. Similar situation takes place in the part of body which is ill since long time. That part doesn't follow the instructions of the brain. This is called "cancer".

According to Yuktivyapashraya, Panchkarma is suggested. Panchkarma has five steps - oilation, fomentation (these are preparatory phases). After this five major purification steps are - Vaman, Virechan, Vasti, Nasya, and Raktmokshan. The possibility of recurrence of the disease is totally finished. Vata, pitta and kapha are balanced by Panchkarma therapy. In other words, Panchkarma is a total detoxification and purification of each and every cell of the body.[7]

In spite of this cancer is a critical disease, treatment is not possible only through herbs. According to Ayurveda the treatment of cancer is possible only through ras-rasayan. Ras-rasayan means mercury and other metals like - gold, silver, copper, zinc, bronze, iron etc. Gems like - diamond, ruby, pearl etc. are also used in the form of ashes in the preparation of medicines. Purification of mercury is very important because it is very lethal in the natural form. When it is purified by applying all the 8 steps with herbal medicines then it is like nectar. This is the best known medicine in Ayurveda which is a remedy for incurable disease. There are lot of doubts related to ashes in modern science. Now we are aware of nano technology. Method of making ashes is based on this. Institutions like CCRAS of Government of India have done various researches for the toxicity and they found that there was no toxicity or harmful effect. It is important to say the method which is described in ancient ayurvedic texts must be followed step by step. Cancer of any stage means uncontrolled multiplications of cells and metastasis can be controlled with in 1 - 3 months.[8]

According to Ayurveda

The uncontrolled multiplication of cells certainly stops within one to three months and also the metastasis or secondary. The dissolution process of tumor depends upon the size and necrosis within the tumor; if it is badly narcotic then surgical intervention may necessary.

The cancerous tumor is dissolved totally by means of Ras-Rasayan Medicines and Panch-karma. In the process of liquification of well defined tumor gets converted into an irregular mass. This can be viewed by means of CT scan / MRI / Ultrasound. Sometimes there may be increase in the size of tumor in the reports, due to irregular shape of liquefied tumor. No surgical process is used in dissolving or extracting the tumor is slowly absorbed by the veins and lymphatic, expelled out of the body. This liquefaction will lead to drying up of tumor. The entire process takes 3 to 4 months to complete itself. If the tumor is based on the bone, it may take a longer period. There will be no need of chemo and radiotherapy.

If the condition of tumor has deteriorated to the extent of formation of

pus cells or necrosis and multiple wounds, even then the process of liquefaction results. The tumor gets dissolved. What needs to be taken care of in this context is to note the site of the wound and to ascertain the likely consequences of dissolution after ripening of the tumor. The treatment of the tumor through Ayurvedic method of surgery is decided on the following basis :

- If the tumor/wounds is present on the outer surface of the body is treated as wounds by following Ayurveda Method
- If the tumor/wounds are present inside the body, Ayurveda advises for 1 - 2 months and then go for modern surgery for the repair

In Devovyapashrya treatment of Ayurveda astrologer also helps in it because our body and our mind are totally attached and influenced by the nature. The status of doshas of the human body varies with the season. Changes in the season are due to the planets like sun, moon, etc.

Satavajay is Psychotherapy because human is not a body but mind and soul also. They have their own nature and disorders also. Mind is divided into 3 categories - Sata, Raja , Tam. If any disease occurs in the body it affects the mind also and vice versa. Energy of mind travels through kundalini (power house) which are related to endocrine glands of human body. Hormones secreted by endocrine glands are responsible for maintaining vital functions of the body.[9]

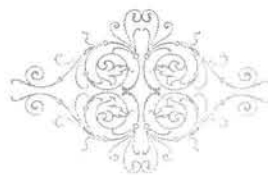
Conclusion :

Ayurvedic physician had a good understanding of etiology, clinical manifestations, symptoms, classification, malignant and benign nature of tumors, metastasis, recurrence, diagnosis, prognosis and treatment. It is remarkable that the basic information is fairly consistent with the current knowledge in these areas given the technology available 800 years ago. The physicians also recognized the facts that malignant tumors must be completely and extensively excised so that not a trace of

tumor is left in the body for even a trace can grow back to a tumor. Various treatment methods, both local and systemic, and various herbal formulations found useful in many tumors are presented.

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Prevention of Ageing

Sushil Kumar Nath.

Lecturer, J.B.Roy State Ayurvedic Medical College & Hospital, Kolkata

Email :- dr_sushilnath@yahoo.co.in

Abstract

Man always wanted to survive longer and live a healthy life. In Ayurveda, there are mentions about different Rasayana (Rejuvenating) therapies and other means which are useful to increase the longevity and to have a healthy life. Anti-ageing addresses how to prevent, slow or reverse the affects of ageing and help people live longer, healthier and happier lives. Anti-ageing factors that work most include- nutrition, physical fitness, skin care, hormone supplements, vitamins, and alternative medicines and holistic approaches. "Panchakarma therapy" on regular basis eliminate impurity from the body as a preventive measure to remain free from the diseases and get longer life.

Key Words : Rasayana, Anti-ageing, Panchakarma therapy.

Introduction :

Man always wanted to survive longer and live a healthy life. From the time immemorial they constantly engaged themselves to search for different means to increase their life span. We get such evidences from different ancient literatures.

In Ayurveda, there are mentions about different Rasayana(Rejuvenating) therapies and other means which are useful to increase the longevity and to have a healthy life.

Monks, Rishis, etc. used to perform different yogic kriya (breathing exercise, meditation, etc.) and survived for longer times. Even some groups of people (Debatas, Asuras, etc.) thought to the extent of achieving the immortal life status (Amaratva) and enjoy the happy life forever. In order to achieve that, they were in search for "Amrita", a special type of preparation that gives immortal life. So, it is obvious, man always urged to slow down his ageing process to survive longer.

Ageing is any change in an organism over time. The ageing is the change in the life processes towards the death of the individual creature. Human life cycle begins rightly with the formation of zygote, which passes through the different developmental & wear and tear phases, and ends with its death. Human beings reach a pick of growth and development during their mid twenties. After that the development process almost retards and the body enters slowly into the decaying phase. There is a general decline in physical, and probably mental functioning. As age increases the function of the different systems gradually slow down, specially the cardio-vascular, nervous, digestive, excretory, reproductive and urinary systems are affected. An individual is more prone to develop some chronic and fatal illnesses. The most common diseases of ageing include arthritis, diabetes, hypertension, heart diseases, Alzheimer's disease and cancer.

Body function that are mostly affected by age include -

- Visual abilities reduces.
- Respiratory & cardio-vascular functions decline.
- Nervous system function slow down.
- Hearing reduces.
- Liver & kidney functions become less efficient & thus the routine elimination of wastes is affected.
- Sexual hormones & sexual function decline.
- Sensation of smell & taste decreases.
- Protein synthesis reduces and that leads to shrinkage in muscles mass & skin, and to decrease bone formation that probably cause the osteoporosis.

* The body water decreases and that reduces the body's ability to absorb water soluble nutrients.

There are several theories on why the body gets aged over the time & ageing body loses functioning. It may be that several factors work together or that one particular factor is the culprit in a given individual. These theories include -

- **Programmed Senescence or ageing clock theory**

The ageing of the cells for each individual is programmed into the genes, and there is a preset number of possible rejuvenation in the life of a given cell. When cells die at a rate faster than they are replaced, organs do not function properly, and they become unable to maintain the functions necessary for life.

- **Genetic theory.** Human cells maintain their own seed of destruction at the chromosome level.
- **Connective tissue, or Cross-linking theory.** Changes in the make up of the connective tissue alter the stability of

body structure, causing a loss of elasticity and functioning, and leading to symptoms of ageing.

- **Free-radical theory.** The most commonly held theory of ageing is based on the fact that ongoing chemical reactions of the cells produce free radicals. In the presence of oxygen, these free radicals cause the cells of the body to break down.
- **Immunological theory.** There are changes in the immune system as it begins to wear out, and the body is more prone to infection and tissue damage, which may ultimately cause death.

According to Ayurveda, ageing is described as a process of increasing vata in the body, in which there is a tendency to become thinner, drier, more nervous, more restless, and more fearful, while experiencing decline in both sleep and appetite.

Anti-ageing addresses how to prevent, slow or reverse the affects of ageing and help people live longer, healthier and happier lives. Life extension is the part of anti-ageing focused on living as long as possible. Anti-ageing factors that work most include-nutrition, physical fitness, skin care, hormone supplements, vitamins, and alternative medicines and holistic approaches. In Ayurveda, there is elaborate description on the subject how to get a longer and healthy life. Charak depicted the matter in details in "Rasayana-adhyaya" (Rejuvenation chapter). According to him, if a person undergoes rejuvenation therapy properly he may attain longevity, memory, intellect, freedom from disease, youth, excellence of lustre, complexion, and voice, excellent potentiality of the body and sense organs and brilliance.

He also described the procedures of the use of rasayana therapy elaborately. He enlisted the several important single & compound rasayana drugs for this purpose. Brahmi-rasayana, Amlaki rasayana, Silajit -rasayana, Pippal-rasayana, Chyavanapras are few such compound rasayana drugs to name. The single ingredient like- Pippali (Piper longum), Amlaki (*Embllica officinalis*), Haritaki (*Terminalia chebula*), Bhallataka (*Semecarpus anacardium*), Nagbala (*Grewata populifolia*), Baca (*Acorus calamus*) are few important one used as rasayana drugs. Carak also advised people to perform "Acara-rasayana" (Healthy & ideal activities) for achieving the longer and healthy life. For that it dictates that one should be truthful, free from anger, should be devoid of alcohol and sex indulgence, avoid violence, practice japa (incantation, etc.) and cleanliness, and offer prayers to the Gods, etc.. The other Ayurvedic scholars opined more or less the similar views on the subjects.

In Sringadhar Samhita there are more specific indications of the use of different rasayana drugs to the people of different age groups in order to get the desired effects for particular purposes. For example, people of the age group of 41-50 years should take Jyotismati (*Celestrus paniculata*), Priyala (*Buchanania langen*), Somraji (*Centratherum anthelmenticum*), Bhringaraja (*Eclipta alba*) for the purpose to intact the lustre, complexion and elasticity of the skin. Similarly the people of the age group of 51-60 years should take Jyotismati, trifala (Haritaki, Amlaki, Bahera), Saptamrita-louha, Satavari (*Asperagus racemosus*) in view to keep the eye-sight intact.

In modern scientific research, it is found that Garlic (*Allium sativa*) is helpful in preventing heart disease, and improving the tone and texture of skin. Garlic stimulates liver and digestive systems functions, and also helps manage heart disease and high blood pressure. Siberian ginseng (*Eleutherococcus senticosus*) supports the adrenal glands and immune functions. It also increases mental and physical performance, and may be useful in treating memory loss, chronic fatigue and immune dysfunctions. Green tea has powerful anti-oxidant qualities, and has been used for centuries as a natural medicine in China, Japan, and other Asian cultures. Similarly, many other herbal drugs are also proved to be very useful for maintaining the positive health and thereby increase one's life span.

Again, preventive health practices such as healthy diet, daily exercise, stress management, and control of the lifestyle habits, such as smoking and drinking, can lengthen the life span and improve the quality of life as people age. Exercise can improve appetite, bone health, emotional and mental outlook, digestion and circulation. Drinking plenty of fluids aids in maintaining healthy skin, good digestion, and proper elimination of wastes. Up to eight glasses of water should be consumed daily, along with plenty of herbal teas, diluted fruit and vegetable juices. Alcohol, nicotine and caffeine all have potential damaging effects, and should better be avoided. A diet high in fibre and low in fat should be used. Processed foods should be completely eliminated.

Most remarkably, in southern states of India specially in Kerala, people undergo "Panchakarma therapy" on regular basis to get eliminated of impurities from their bodies as a preventive measure so that they can remain free from the diseases and get longer life.

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Responsible factors for normal delivery of fully grown normal foetus

Neelam

Professor Department of Prasuti Tantra, Faculty of Ayurveda,
Institute of Medical Sciences, Banaras Hindu University Varanasi - 221005.
E-mail :- drneelamaditi@rediffmail.com

Abstract

Ayurveda is a science of life right from conception in the womb of mother till its last breath and includes psycho-socio-philosophical and spiritual aspects of life. The woman is the origin of the progeny and she is the creature of nature in which the foetus develops. Ayurveda has preached the philosophy of congenial environment, psychological happiness, and desire to have pregnancy and physical fitness are pre-requisites of couples before making an attempt to achieve a conception and health child possessing all the qualities and long life, excellent, woman gains strength and complexion and delivers easily at proper time a desired, nails become soft, skin, faeces and urine are excreted normally and placenta expelled easily without any complication, Vayu moves into its right path or direction, flanks and back become soft, sacral region, vaginal canal, abdomen women, told in Ayurveda, the month 1st to 1 by following the regimen from

Keywords Ayurveda, Vayu, foetus, conception

Introduction

Ayurveda is a science of life right from conception in the womb of mother till its last breath and includes psycho-socio-philosophical and spiritual aspects of life. A balanced combination of the preventive and curative aspects of different disease with paramount importance to preventive aspect-

“A way of Living Healthy Life” is found only in Ayurveda.

“God created mother because She cannot be everywhere.” Pregnancy is a gift from God and is an unparalleled privilege, for in pregnancy we cooperate with Him in creation of a new human life with a human soul that will live forever. Birth is not life, it is only an opportunity given to create life as beautiful, glorious, healthy, loving, as one can imagine and dream. The moment a child is born, the mother is also born. The woman existed, but the mother never. Motherhood is the cherished desire deep down in the heart of every woman. The desire for offspring in every woman is so synonymous with motherhood as it adds a new meaning to her life and existence.

The woman is the origin of the progeny and she is the creature of nature in which the foetus develops. In today's society usually conception is an event or incident happening accidentally during fulfillment of biological demands for carnal pleasure. It is only barren couple that desire, plan and make sincere efforts to achieve conception. However, Ayurveda has preached an entirely different philosophy, where in congenial environment, psychological happiness, and desire to have pregnancy and physical fitness are pre-requisites of couples before making an attempt to achieve a conception. Mentally and physically healthy couples can only provide the society a healthy child endowed with the qualities of becoming a perfect citizen. The health of any nation mainly on the health of the women because the healthy and happy women lay the first step of prosperous nations. The woman is considered as one of the most essential factor of the continuing of the human race. Some

factors are responsible for normal delivery of normally developed full term foetus in order to full fill woman's achievement.

शुक्रासृगात्माशयकालसंपदं यस्योपचारश्च हितैस्तथाऽनैः।

गर्भश्च काले च सुखी सुखं च संजायते संपरिपूर्णदेहः॥

(C. Sh.2/6)

If *shukra* (sperm), *artava* (ovum and female sex hormone), *atma*, *ashaya* (uterus) and *kala* (time factor) etc. all are perfect, dietetics and mode of life advocated for pregnant women are followed properly, then the healthy, well grown foetus possessing all his body parts will deliver with ease, at proper period.

Shukra - Shukra arises from shukra-dhara-kala which is present all over the body. Shukra consists of both semen and sperm. It is carried by shukra vaha srotasas. Shuddha shukra (semen) is like quartz, liquid, sweet, unctuous, sweet smelling like honey while others mention it as resembling oil and honey. (S.Sh. 2/11).

Asrika- It also arises from shukra-dhara-kala and comprises of both ovum and female sex hormones. Shuddha artava is that which has intermenstrual period of one month, duration of blood loss is five days, not associated with pain or burning, excreted blood is not unctuous, not very scanty or excessive in amount, the colour resembles the red juice of laksha, red lotus flower, fruit of jequirity or rabbit's blood. (S. Sh. 2/17; C. Ci. 30).

Atma (soul) - Atma is shadow of God, the eternal, who is without beginning and end, invisible, immortal and is only known by reflection. When it combines with 5 elements it produces the living body and becomes evident by its action. The presence of soul is necessary to animate the body.

Ashaya - The shape of this eighth ashaya i.e. uterus resemble the shape of a couch shell and has three avartas (layer). Out of these the third avarta (inner most layer) is the seat of garbha. This is situated

in the space between pittashaya (intestines) and pakwashaya (large intestine). (Su. Sha. 5/43,47).

Kala (time)—The ideal time for conception is ritukala because after ritukala the yoni of woman gets constricted and does not accept shukra or permits the entry of bija (sperm) into its inner component i.e. uterus. (S.Sh.3/9). Life span of child shortens gradually with conception occurring after ritukala just as the paddy sown after its appropriate season possesses less property, is weak, unstable, unsteady, thin and fragile, similar is the case with the child.

Dietetic and mode of life – Different authors in various Ayurvedic texts have prescribed month wise dietary regimen and mode of life. By following the dietetic regimen woman remains healthy and delivers a healthy child. According to Charaka (C.Sh. 4/7) when a man copulates with a ritumati (during ovulation) woman, then due to excitement and pleasure the dhatrupa shukra is excited. This shukradhatu coming out of the male's body, in the form of bija (seed or sperm) enters the uterus through proper passage (vagina) and get mixed with artava or shonita (ovum). At this very time, due to association of satva or mana, the jivatma comes there in the garbha (zygote). Due to constant use of congenial diet by the pregnant woman, this garbha (foetus) grows normally and gets delivered at appropriate time with all indriyas (sensory and motor organs), complete body parts, bala (energy), varna (complexion), satva (endurance) and samhanana (compactness) along with matrija (maternal), pitrija (paternal) atmaja, satmyaja and rasaja bhawas (physical and psychological components) having association of mana.

गर्भवत्यां सगर्भाया स्त्रियाम् (शब्द स्तोम महानिधि पृ० १५३)

A woman bearing a garbha is known as garbhini. A pregnant woman has been considered as a pot filled with oil which has to be handled very carefully or with delicacy so that she deliver a healthy baby at the completion of her term.

A special dietary regime and code of conduct has been advocated for the pregnant woman right from the first day till the ninth month of pregnancy. This regime has been formulated considering the different physiological changes taking place in the pregnant women alongwith the requirements of the growing foetus. When we turn the pages of various Samhitas we find that the stages of fetal growth and development have been studied very carefully and the diet and drugs prescribed to the pregnant woman has been formulated accordingly. According to modern view the gestational

period for a women is on average 9 months and 7 days, calculating from the first day of last menstrual period. As pregnancy precedes supplementation are needed along with a wholesome balanced diet. Folic acid is given even before conception till delivery. From 2nd trimester iron and calcium supplementation is a must, as the requirement by the growing foetus exceeds the amount provided by the diet. According to Charaka (C.Sha. 9/ 32) by following the dietetic regimen woman remains health and delivers the child possessing good health, energy, voice, compactness and much superior to other family members. Charaka and Vagbhata (C. Sha. 9/32; A. S. Sha 3/13) further say that by the use of this regimen from 1st to 9th month women's abdomen, vaginal canal, sacral region, flanks and back becomes soft, vayu moves into its right path or direction, feces and urine are excreted normally and placenta expelled easily without any complication, skin, nails become soft, woman gains strength and complexion and delivers easily at proper time a desired, excellent, health child possessing all the qualities and long life.

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Yoga, the Equilibrium between Mind And Body

Nilima N. Wadnerwar

Assitant Professor Department of Agadtantra, Mahatma Gandhi Ayurved College,
Hospital & Research Center, Salod (H)(H), Wardha.

E-mail: dr.nilima_wadnerwar@rediffmail.com

Abstract

Human body has the natural healing force which is the greatest force in maintaining health. The power of thoughts and emotions is used to influence physical health. Ayurveda, the ancient system of management, has the holistic approach in the prevention as well as management of the disease. *Ayurvedic chikitsa* has various types like *Daivavyapashraya*, *Yuktivyapashraya* and *Satwavajaya chikitsa*. *Daivavyapashraya chikitsa* is for psychosomatic disorders. *Yuktivyapashraya chikitsa* is for somatic disorders and *Satwavajaya chikitsa* is used for diseases of *Mann* (Mind). For somatic disorders there are various types of treatment in different streams of medical sciences. But whenever the mind is affected, it becomes a complicated thing of concern. Ayurveda has widely described about the different treatment modalities to maintain the body and mind healthy. Because health of body and mind are interrelated. Ayurveda has provided Ashtang Yoga which includes eight types of treatment to "train" the mind to focus on the body without distraction and to maintain the soundness of mind and body affecting multiple factors including psychological, emotional, genetic, endocrine, nervous and immune system.

Key words: Natural healing force, Ayurvedic chikitsa, Ashtang Yoga.

Introduction :

Human body has the natural healing force which is the greatest force in getting well from the disease and maintaining health. In mind-body medicine, the power of thoughts and emotions is used to influence physical health. Ancient Ayurvedic medicine emphasizes the links between the mind and the body. It is a fact that whenever a person becomes diseased, he feels depressed. Naturally, along with the body, his mind gets involved unknowingly in the disease process. Hence, it becomes mandatory to treat the somatic disease along with the mind. That is why, Acharyas have described some psychological treatments like *Ashwasana* (assurance), *Harshana* (Pleasing), *Tarshana* (Satisfaction) in the diseases where patient becomes anxious, stressful fearful and depressed. In such condition, the patient's mind has to be trained to focus on the body without distraction. In this state of "focused concentration," a person may be able to improve their health. To treat the mind it is necessary to recognize and change harmful thoughts. In cases of depression, patient should be taught to counter negative thoughts and feelings with positive ones.

Many of the times spiritual beliefs, attitudes, and practices affect health. Those who had faith in God, compassion toward others, a sense of inner peace, and were religious had a better chance of surviving for a long time with a complicated disease than those who did not have such faith or practices. Qualities like faith, hope, and forgiveness, and using prayer and social support, have a noticeable effect on health and healing.

Effect of Mental Factors :

When we are physically or emotionally stressed, our body releases stress hormones that can affect all our systems and organs. For example, stress related to hostility and anxiety can result in

disruptions in heart and immune function. Similarly, depression and distress may diminish the body's natural capacity to heal.

Certain emotions have been associated with disease. For example, hostile attitudes may increase your risk for coronary heart disease, obesity (especially around the waist), insulin resistance (which can lead to diabetes), and abnormal cholesterol (specifically, high triglycerides and low levels of high density lipoprotein or HDL -- the good kind of cholesterol).

There is no evidence that negative emotions actually cause disease. But being stressed and having negative emotions can be unhealthy. Unconsciously being defensive or stifling feelings may result in medical consequences, such as high blood pressure. High blood pressure is also associated with feelings of hopelessness. How a person deals with emotions may also affect how long they survive with a chronic illness.

In such conditions, body and mind has to be relaxed and the levels of stress hormones in the body have to be reduced, so that our immune system is better able to fight off illness.

Relaxation exercises, meditation, yoga and other techniques can bring about many beneficial changes including a lower heart rate, and muscle tension and positive changes in brain waves.

Aim of the topic :

To illustrate how Yoga is beneficial to train the mind to focus on the body without distraction.

Need of the topic :

On the juncture of modern atomic age, there is only a growth of mechanistic materialism, flat empiricism, superficial positivism and vulgar utilitarianism bound up the growth of modern culture. Entire world is suffering from virus of unhappiness and

distractions and is restlessly searching for a path of remedy of it.

Definition of Yoga :

Yoga is withdrawal of the fluctuations of consciousness.

Man is endowed with mind (*Manas*), intellect (*Buddhi*) and ego (*Ahamkara*), collectively known as consciousness which is the source of thinking, understanding and acting.

The withdrawal of fluctuations of consciousness can be done by *Abhyas* and *Vairagya*.

Repetition of thoughtless and actionless state of consciousness is *Abhyasa*.

Withdrawal of consciousness of from the wordly subjects and contemplation in higher goal is *Vairagya*.

For the practice of *Abhyasa* and *Vairagya* there are eight stages of *Yoga*, *Ashtang Yoga* i.e. *Yama*, *Niyama*, *Asana*, *Pranayama*, *Pratyahara* *Dharana*, *Dhyana* and *Samadhi*.

Aim of Yoga :

The review of history reveals, aim of Yoga is changing from ancient to this modern era of science, as summarised-

Early Upanaishad – A path of realization of self & ultimate.

Bhagavad Gita – The way of life without wordly bondage.

Patanjala Yoga – Withdrawal of mental fluctuations.

Hatha Yoga – A path for Rajyoga by physical processes.

Shri Aurobindo, Mahatma Gandhi, Swami Vivekanand – For social reform and development.

In modern era – For positive health.

Yama :

It is a name of five universal morals or ethical rules for social reformance.

1. Ahimsa(Non violence)
2. Satya(Truth)
3. Asteya(Non stealing)
4. Brahmacharya (Celibacy)
5. Parigraha(Not desiring for other's things).

Niyama:

It is a name of five universal morals for the purification of body and mind of individual. Five Principles for social well being.

1. Shoucha(Cleanliness)
2. Santosha(Contentment)
3. Tapas(Penance)
4. Swadhyaya(Self study)
5. Eshwar Pranidhana(Dedicating to god).

Asana:

Third part of yoga which includes different yogic postures. Stable & comfortable posture in which a person can remain for a long time is called *Asana*. It is the first step of Hathayoga which

produces lightness in the body, enhances strength & health.

Pranayama:

Prana means breath, respiration, life, vitality, wind energy or strength. *Ayama* means lengthen, expand, stretch or restraint. Controlling inspiration & expiration is known as *Pranayama*. It purifies the channels of the body leading to longevity of life.

Physiology of Pranayama:

During *pranayama*, the mechanism of respiration is somewhat different from normal breathing.

Puraka phase (Inspiration):

Air is inhaled slowly and deeply, so that lungs are expanded considerably. In normal involuntary inspiration when inhaled air is more than one litre, stretch receptors of the lungs are stimulated to stop the process of inspiration but during *Pranayama* the normal stretch reflex is inhibited under strong voluntary control of cerebral cortex. The stretch receptors are thus trained to withstand more stretching and air can be held for a longer time with ease.

The practice of prolonged inspiration increases the cardiac output due to increased venous return, so the regular practice of slow and deep inhalation is cardioprotective in nature.

Kumbhaka phase (Breath retension):

Retention of air is done under voluntary control of cerebral cortex by inhibiting stretch reflex mechanism. The duration of *Kumbhaka* is gradually increased over a long practice of *pranayama* due to adaptation of respiratory center to higher concentration of CO₂ in blood, which produces tranquilizing effect on mind.

Rechaka phase (Expiration) :

During expiration intrapulmonary pressure reduces slowly, but concentration of CO₂ in blood is still increasing. The chemoreceptors are trying to inhibit exhalation and to start inhalation by stimulating the respiratory center. But this reflex is voluntarily controlled by cerebral cortex. By the regular practice, chemoreceptors are adapted to higher concentration of CO₂ in blood.

Effects of Pranayama:

Impurities are destroyed and aspirant gets the ability to concentrate the mind.

By the practice of *Pranayama*, *Prana* *vayu* is retained in the body. Mind becomes still (thoughtless) and steady.

During this practice of *Pranayama*, there are lots of physical and mental changes with following beneficial effects-

Alveolar ventilation is increased in the lower areas of lungs and blood circulation is increased at the apex, so the ventilation perfusion ratio (VA/Q) is optimized and vital capacity is increased. This effect is very useful for the patients of chronic obstructive lung diseases and bronchial asthma, where VA/Q is disturbed.

Optimal ventilation-perfusion ratio at the apex of lungs is preventive for pulmonary tuberculosis, which is most sensitive site.

During Nadi Shodhan and Pranayama the respiratory channels are cleansed and process of respiration becomes easy.

The rhythmic contraction and relaxation of diaphragm and abdominal muscles stimulate the circulation and optimize the intestinal movements, which regulate the intestinal function ie digestion, absorption and evacuation. This proper functioning is preventive for many disorders like indigestion, constipation, peptic ulcer, flatulence etc.

Optimizes the blood circulation of the whole body, which tones the nerves, brain, liver, kidneys, heart, endocrine glands and all other organs and maintains their efficacy.

Perspiration produced during Pranayama acts as an accessory kidney and helps in excretion of toxins.

Practice of Pranayama reduces the sympathetic over activity in the body, which is beneficial for heart diseases.

Practice of Pranayama induces tranquility of mind, so it is effective in many mental and psychosomatic disorders eg- anxiety, insomnia, hypertension, ischemic heart disease, peptic ulcer, irritable bowel syndrome, diabetes mellitus etc.

Regular practice of Pranayama balances the sympathetic and parasympathetic activities and harmonises all over functions of the body and enhances the immunity, so Pranayama promotes the health and prevents or cures the diseases.

Pratyahara:

It is the act of self control & the bridge between *Antaranga* & *Bahiranga Yoga*. It is a step to attain ultimate goal, the salvation. Mind wavers due to union with sense objects like sound etc.

Thinking about self or disconnection of the senses with outer world and internalisation of senses is called as *Pratyahara*.

Dharana:

Process of withdrawal of mind from the sense & its blending with soul is *Dharana*. After remembering the goal, concentrating over it & blending with soul is *Dharana*. It is a process of concentration over a single point inside or outside the body.

Dhyana:

Deep concentration in a particular thought or region like heart in which mind in state of complete concentration (ekagra) called *dhyana* (meditation).

Two types:

1. *Saguna dhyana*: Meditation by concentrating over idol or symbol.

2. *Nirguna dhyana*: Meditation by concentrating over soul (*Atma*).

Samadhi:

Deep state of meditation where in yogi forgets about everything including himself, unaware of surroundings. The aspirant loses consciousness of his body, breath, mind, intellect & ego and realize the ultimate goal.

Effects of Samadhi:

- Jiva breaks away the bonds from the body & comes one with the universe.
- All the good deeds of yogi gets destroyed at the time of liberation (*Nirvana*).

Aids for Yoga:

- With proper diet & life style, proper sleep and proper working, yoga destroys all sorrows.
- If a yogi has faith in yoga, he gets power, memory, higher state of meditation (*Samadhi*) and finally the realization of truth, so he should adopt them one by one for the perfection of next.
- Enthusiasm, perseverance, discrimination, unshakable faith, courage, avoiding the company of common people are the six aids which bring success in Yoga.

Technique of relaxation:

Shavasana: *Shava* means dead body, Corpse pose or *Mritasana* or dead man's pose. It relaxes the body from tiredness. It enables the mind to calm. It is beneficial in hypertension, anxiety, insomnia and psychosomatic disorders.

Yoga is a way of life which balances, harmonizes or disciplines every aspect of life; either physical, mental, social or spiritual.

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Panchakarma – A scientific approach

Vaishali Kuchewar,

Reader, Dept. of Kayachikitsa
Mahatma Gandhi Ayurveda College Hospital & Research Centre, Salod (H) Wardha 442004

E-mail :- vkuchewar@gmail.com

Abstract

Panchakarma is a formulated samshodhan (Biopurification) procedure to purify the body. The aim to write about panchakarma is to aware people about purification methods because many misconceptions regarding panchakarma are there in doctors as well as in common people. Some researches are held in different universities showing significant decrease in toxins in blood after panchakarma.

Key words – Panchakarma, vamana, virechana, vasti, nasya, Raktamokshan, PCBs, pesticides.

Introduction

Panchakarma is a procedure to purify the body. People are not that much aware about it because of lack of knowledge as well as lack of scientific base.

I would like to share some views, studies & action of panchakarma procedure.

Why there is need to purify the body?

Ayurveda considers the body to be an aggregation of strotamsi i.e. porous structure. Grossly, all the major systems of the body, related organs & their channels, the blood vessels, lymphatics, sinusoids, capillaries & intercellular spaces can be called strotamsi. The nucleus of the cell is also composed of minute pores in its membrane by which the cytoplasm & nucleoplasm are interrelated. Any alteration in functioning in these passages leads to maltransportation of metabolites & it ultimately leads to genesis of diseases. (1) Samshodhan therapy helps to clean the channels & to rejuvenate them for ensuring a proper transportation of the metabolites. (2) We can observe that the list of infectious, autoimmune, immunodeficiency diseases is increasing in spite of invention of many antibiotics, immunosuppressant & immunomodulator medicines. Ayurveda believes that if the medium at where the disease process takes place is in balance state, no organism can survive in the body. So for the maintenance of homeostasis, body purification is required because many toxins are accumulated in the body because of unhealthy life style & poor food habits.

How to purify the body?

There are four ways to expel toxins from the body.

Purification by oral route i.e. vamana

Purification by rectal route i.e. virechana & vasti
Purification by nasal route i.e. nasya
Purification by dermal route

i.e. Raktamokshan Vamanakarma - It is useful in many diseases as a preventive as well as curative. Commonly it is used in bronchial asthma, allergic rhinitis, recurrent belching, acidity, obesity, Hypercholesterolemia, tendency of abnormal glandular growth in body. It is contraindicated in gastritis, peptic ulcer, very weak person, cardiac disorders. (3)

Virechanakarma is useful in chronic constipation, skin diseases. (4)

Vastikarma – it is called as ardhachikitsa because in many disorders it is indicated. It is used in obesity, many neurological disorders, intestinal disorders, musculoskeletal disorders. (5)

Nasyakarma – it is useful for headache, migraine, sleeplessness, sinusitis, recurrent URI. (6)

Raktamokshana – it is indicated in some skin disorders, some local painful conditions, hypertension.

These all above procedures can be done in particular season for healthy individuals also to maintain health & to prevent diseases.

International studies - It has been scientifically shown that a natural purification treatment can successfully eliminate environmentally toxic substances.

A study at the Institute of Science, Technology and Public Policy at Maharishi University of Management in Fairfield, Iowa in collaboration with a special laboratory at Colorado University demonstrated that classical Panchakarma treatment eliminated up to 50% of the detectable toxins in the blood.

A cross sectional study was conducted on 88 subjects, 48 had previously undergone the detoxification procedure and 40 had not. Blood samples from both groups were sent to the Analytical Laboratory in the Department of Environmental Health at Colorado State University that was blind to the treatment status of the subjects.

The specific PCBs (9 polychlorinated biphenyl) and pesticides

that were studied had either been previously linked to major health problems or had been of high concern for their potential toxicity.

The results showed that blood levels of PCBs (9 polychlorinated biphenyl) and several pesticides were significantly lower in the detoxification group than in the control.

In the longitudinal study, 15 subjects who participated in the Ayurvedic detoxification procedure were assayed, pre- and post-treatment, by Colombia State University Analytical Laboratory.

The results of the two-month longitudinal study showed that PCBs levels were reduced by 46 percent. Previously, no method had been scientifically verified to reduce levels of these lipid-soluble toxicants in the human body without causing negative side effects.(7)

Conclusion –

The above studies itself state importance of panchakarma. Environmental pollutions, the food which we eat, these are unavoidable things, but it is in our hand to make fit our body to cope with above things by implementing panchakarma in daily practice.

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Clinical Study of Haridra and Kumari on Episiotomy Wound Healing

Dr. Vandana Rani,

Lecturer, J. D. Ayurvedic medical college, Bhankari, Aligarh

Prof. Mukta Sinha,

Professor & Head, Department of Prasuti Tantra, Faculty of Ayurveda,
IMS, BHU, Varanasi

Abstract

Episiotomy is one of the most commonly performed procedure in obstetrics. Post natal complications were more common among women who had episiotomy compared to those who did not have episiotomy hence postpartum care for episiotomy wound should begin as soon as possible, so the present study work has been done on episiotomy wound healing. Basically, two things, *shodhana* (cleaning the wound) and *ropana* (Closure of the wound), are desirable for proper healing. Many drugs have been described in classics for healing, but none of them is capable of healing the wound individually. Hence, to fulfill the aim, *Haridra and Kumari sadhit ghrī* was prepared and evaluated clinically its healing properties on episiotomy wounds in this study. It was used topically on Episiotomy wounds. Out of 50 patients, 25 patients in group B were treated with " *Haridra and Kumari sadhit ghrī* " (trial group), while 25 patients in group A (Control group) treated with Soframycin ointment with oral antibiotic and anti-inflammatory drugs. Better result was observed in the trial group in comparison to the control group. No adverse effect was observed in any patient.

Keywords :- Episiotomy, postpartum, *shodhana* , *ropana* , *Haridra* , *Kumari*

Introduction-

"It is well recognized that the best maternal outcome of pregnancy is a normal vaginal delivery with an intact perineum". Though parturition is a physiological phenomenon, but all the pregnant women may not be delivered physiologically normal, and need special attention. Sometimes to avoid bigger complication, we have to deviate from normal process. Performance of episiotomy during second stage of labour is one of the example. **Episiotomy** is defined as, a surgical incision on the perineum (the area of the skin between the vagina and the anus) during the second stage of labour to enlarge the diameter of the vulval outlet to facilitate the passage of the fetal head and prevent uncontrolled tear of the perineal tissue.

Episiotomy was once the most frequently performed operation in obstetrics. In 1979, episiotomy was performed in 62.5% of all vaginal deliveries in the United States, and in nulliparous women, the episiotomy rate rose to 80%. In 2004 the rate of episiotomy with all vaginal births was 24.5%. There are various arguments for and against episiotomy. Although rates of episiotomy have decreased in recent years, but it is still one of the most commonly performed procedures in obstetrics., because, many obstetricians believe that since episiotomy is a surgical clean cut, it heals much faster than a natural tear, which often occurs during childbirth and in certain circumstances, episiotomy may become inevitable. Post natal complications were more common among women who had episiotomy compared to those who did not have episiotomy. Hence Postpartum care for episiotomy wound should begin as soon as possible.

Although in any *Ayurvedic samhita*, description of episiotomy wound has not been given but it can be taken as *shuddha agantuja vrana* or *vaidyakrit vrana*, the vrana made by the surgeon and

which should be adequate in length and width, with clear division (edge separated), with absence of hollow space inside and should be done at the proper time. Healing of wounds, whether internal of external, involves a series of overlapping events viz. inflammation, cell migration, angiogenesis, matrix synthesis, collagen deposition and re-epithelialisation. The drug mainly suppress the obstacles and normalize the healing process. According to *acharya sushruta ALEPA* (application of paste) is the first step of treatment for wounds and inflammations. The clinician should apply *alepa* for the alleviation of the wounds situated on the vital spots and on the external genitalia of human beings. Acharya *sushruta* said " **just as fire of a burning house is immediately controlled by spraying of water, similarly the pain (of the wound) is removed by the application of the alepa.**" And also the application of *alepa* on wound is soothing, it cleanses the wound, reduces the swelling, fills up the wound and heals it.

Aim of study

Keeping all in mind, to evaluate the local application of trial drugs *Haridra (Curcuma longa)* and *Kumari (aloe barbadensis)* as an effective treatment with higher acceptability, the present clinical study was carried out with "*Haridra and Kumari sadhit ghrī*" in the management of episiotomy wound

Materials and Methods

Haridra (Curcuma longa) and *Kumari (aloe barbadensis)* both are selected for present research work due to their authentic references, easy availability, economies, wound healing properties, anti-inflammatory, anti-microbial, analgesic, and anti-oxidant properties etc. The wounds included in this study were

fresh wounds of episiotomies and management of these wounds done by local application of *Haridra and Kumari Sadhit Ghrita*. Preparation of the *Ghrita* as per the instructions mentioned in the *Sneha Kalpna (Ghrita Kalpna)* in *Sharangadhara Samhita*, madhyam khanda, navam adhyaya.

Criteria for selection of cases

Inclusion Criteria

All the patients were registered for the clinical study those admitted in the *Labour Room of the Prasuti Tantra, Ayurvedic wing of "Sir Sunderlal Hospital", IMS, BHU, Varanasi*, undergoing Spontaneous Vaginal Delivery with episiotomy.

patients who had regular ANC checkups and previously routine investigations performed regularly.

Exclusion Criteria

The patients who had any systemic and local infections (like tuberculosis, HIV, Vulvovaginitis, any growth on perineal region, etc), diabetes, severe anaemia and any bleeding disorders etc. were excluded

Grouping and drug schedule

Total 50 patients with episiotomy wound were included in the study. The patients were randomly divided into two equal groups (25 patients in each group),

Group A- Control Group and Group B - Trial Group

Groups	Name of drug	Drug form	Mode of application	Dosage	Duration
Group A	Soframycin	Local ointment	Local application	As per requirement	10 days
	+ Ciprofloxacin	+ Antibiotic	+ Oral	+ 200mg BD	5days
	+ Lyser-D (Seratiopeptidase: Diclofenac sodium)	+ Anti-inflammatory	+ Oral	+ 10 mg:50 mg TDS	5 days
Group B	<i>Haridra kalka</i> and <i>Kumari majja</i>	Medicated <i>Ghrita</i>	Local application	As per requirement	10 Days

Parameters for clinical study

During follow ups wounds were examined under following specific parameters as inflammation (which included pain, colour, swelling and temperature of wound). Tenderness, discharge and gapping in episiotomy wound.

Follow ups

The wound was examined on initially (within 24hours), then 1st follow up (1st post-operative day), 2nd follow up (2nd post-

operative day), 3rd follow up (3rd post-operative day). All patients discharge from hospital on 3rd post-operative day and further reviewed on 10th post-operative day (4th follow up) and it assist final..

Criteria for assessment:

Statistical analysis and percentage of relief (before and after treatment) was taken to know the efficacy of the trial drugs. Score 1 to 3 was given according to severity of symptoms.

Criteria for assessment of status of healing

Scoring	Status of healing	Criteria
3	Completely cured (very good status of healing)	100% relief in signs and symptoms of wound along with complete healing.
2	Cured (good status of healing)	≥ 75% relief in sign and symptoms of wound along with complete healing.
1	Partially cured (average status healing)	50-75% relief in signs and symptoms of wound along with healing of wound.
0	Uncured (Poor status of healing)	no relief or up to 25% relief in signs and symptoms of wound without healing.

Observations and Results

Most of the cases were between the age group of 21-25 years i.e. 60%, first gravida i.e. 66% , Primipara i.e. 72% and with gestational age of 38-39 weeks i.e. 58%. In primiparous women, perineum is comparatively rigid than multiparous women and more chances of perineal tear, hence to avoid this complication episiotomy is usually done in primiparous women. Most of the cases had average status of hygiene and nutrition i.e. 66% and 64% respectively.

During follow ups wounds were examined under following parameters as **inflammation (which in included pain, colour, swelling and temperature of wound)**, **Tenderness, discharge and gapping** in episiotomy wound. Observations were made and assessment done in all follow ups (Ist to IVth) but after IVth follow up,

expected result were noted in all parameters. Regarding inflammation, after IVth follow up, in Group A, 17 (68%) cases completely relieved and 7 (28%) cases had mild inflammation while in Group B, 23 (92%) cases were completely relieved and 2 (8%) cases had mild inflammation. There was no statistical significance noted in both the groups ($p>0.05$), may be due to small sized group. In episiotomy wound after IVth follow up, in Group A, 3 (12%) cases were completely relieved from tenderness and 16 (64%) cases had mild tenderness. 5(20%) cases had moderate tenderness and 1(4%) case had severe tenderness. While in Group B 15(60%) cases completely relived, 8(32%) cases had mild tenderness and only 2(8%) cases had moderate tenderness. Statistically significant difference noted in both the groups ($p>0.05$) in tenderness.

Showing the final status of healing in episiotomy wound in Group A and GroupB:

Status of healing	Group A (Total no. of pts =25)		Group B (Total no. of pts=25)	
	no. of pts	Percentage	no. of pts	Percentage
Very good (completely cure)	3	12%	15	60%
Good (cured)	17	68%	8	32%
Average (partially cured)	4	16%	2	8%
Poor(uncured)	1	4%	0	0%
Between the Group comparison (PEARSON Chi-square test)	$\chi^2 = 12.907$ $p = 0.005$ (S)			

Thus we found that better results were observed during follow ups in all parameters in Group B where wound treated with local application of *ghrit* medicated with *haridra kalka* and *kumari majja* as compared to Group A where wound treated with local application of *soframycin ointment* along with oral antibiotic and anti-inflammatory drugs.

Discussion

In present study the medicated *Ghrit* contain two drugs namely '*Haridra*' (*Curcuma longa*) and '*Kumari*' (*Aloe barbadensis*). From ayurvedic point of view the effect of both drugs on episiotomy wound healing can be explained on the basis of there properties (rasa, guna, veerya and vipaka). *Haridra* acts on wound by its *ushna veerya* property to alleviate *vata* and *kapha* but its *tikta rasa* also alleviates *pitta* in some amount. Due to *vata shamak* action it reduces pain (*Vednasthapak*) at the site of wound. Its *tikta rasa*, *ushna veerya*, and *katu vipaka* reduces *shotha*. Its *tikta rasa* also responsible for *rakta-prasadana* and *rakta-stambhana* which

helpful for *vrana ropana*. Healing always takes place in a *shuddha vrana*. *Shodhana* in this context refer to irrigation of the local debris by means of *lekhana* action and *ruksha* and *laghu guna*. *Haridra* posses all the 3-properties hence responsible for *vrana shodhana* also. *Kumari* posses *Madura rasa* which provides *dhatu poshana* to skin and thus helpful for healing of wound and its *tikta rasa* dries up the *kapha dosha* and *puya*, strengthen *twacha* and *mansa dhatu*. Its *sheeta veerya* alleviates *pitta* and creates cool effect in burning sensation and check *vrana shotha*. Its *snigdha* and *pichchila guna* covers the wound and prevent it from external pathogens. *Ghrit* is used as a carrier for herbs because of its supreme penetrating qualities and thus ability to carry these substances deep into the *dhatu*s or tissues. *Ghrita* has one property *Samskara-nuvartanum* and it carries active principles of the drugs to increases the potency of the compound drugs

From modern point of view some possible mechanism of drug action, which proved by different studies, are given below:

The main chemical constituent of *haridra* is *curcumin*. *Curcumin* increases the m-RNA transcripts of transforming growth factor- β

which is also responsible to enhance wound healing. *Curcumin* also acts as anti-inflammatory by inhibiting the activities of *lipoxygenase* and *cyclo-oxygenase* as well as the enzyme *nitric oxide synthetase*. It also inhibits *arachidonic acid* as well as *prostaglandin E2* and *leukotrienes*. *Haridra* contains a mixture of powerful *anti-oxidant* phytonutrients known as *curcuminoids* hence it prevents oxidative damage of DNA and found to scavenge free radicals(peroxides). *curcuma longa* also has *anti-bacterial activity* against gram positive and gram negative bacterias.

Aloe provide *emulsifying and emollient properties* which needed for wound repair. *Aloe vera* is also a good vehicle for *vitamin C*, *tryptophan* and *phenylalanine* which had good *local anti-inflammatory activity* in *inhibiting PMN infiltration*. *Carboxypeptidase* from *Aloe vera* can inhibit *bradykinin* in vivo thereby decreasing pain at the site of acute inflammation. Organic compound such as *emodin*, *Aloe emodin* and *alovin* all are broken down by the *Kolbe reaction* to form *salicylates* which have both *analgesic* and *anti-inflammatory properties* and inhibit the production of *prostaglandin*. *Lipophilic* nature of *ghee* facilitates entry of the formulations into the cell and its delivery to the mitochondria, microsome and nuclear membrane.

Conclusion

On basis of clinical observations it can be concluded that the trial drug "*Haridra and kumara sadhit ghris*" possess *anti-inflammatory, antibacterial, analgesic and anti-oxidant properties*. There is no unwanted effect found during the course of treatment. It is found better in the management of episiotomy wounds in comparison to control drug. It shown 92% cure rate with comparison to control drug which shown 80% cure rate. Though, the results are very good but further study on large number of patients with other types of wounds is expected to arrive a definite conclusion.

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A clinical Study of Kasahar Kwath & Sadyasnehpan in younger Children of Upper Respiratory Tract Infection.

Renu Bharat Rathi,

Associate Professor Department of Kaumarbhritya,
Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha, Maharashtra
Email :- rbr.226@gmail.com

Abstract

Upper Respiratory Tract Infection is the most frequent medical problems in childhood, usually due to viral infection. Ayurveda contributes several modalities of treatment. Among all the modalities, polyherbal preparations are said to be safer, effective & well accepted. Sadya snehpan & fresh, warm kwath with dhumpan of kwath are beneficial to provide instant relief in suffering, without side effects. It is found that trial kwath with sadyasneh is very effective in acute & chronic kasa without side effect due to ushna, teekshna, katu-tikta rasatmak act as a good kaf-vathar has ability to stop sign & symptoms of acute & chronic upper respiratory tract infection.

Keywords :- Upper Respiratory Tract Infection, viral infection, sadya snehpan, dhumpan

Introduction

Upper Respiratory Tract Infection is the most frequent medical problems in childhood, usually due to viral infection of the upper respiratory tract. It is associated with nasal discharge, congestion, dry or cough with expectoration, tachypnoea, breathlessness, adventitious sounds, lack of appetite, Irritability, sleeplessness etc. In recent years, there is prevalence of recurrent

RTI-Respiratory Infections may be due to pollution or sedentary, stressful lifestyle

Rural, remote population still have limited or no access to modern medicines, hence trial yoga has taken which is available at home. Ayurveda contributes several modalities of treatment. Among all the modalities, polyherbal preparations are said to be more safe, effective & well accepted. sadya snehpan & fresh, warm kwath with dhumpan of kwath are beneficial to provide instant relief in suffering, without side effects. The goal of upper respiratory tract infection. treatment has shifted from symptom relief to disease control.

Aim & Objectives -

The aim of the treatment was to explore the role of Kasahar kwath with dhumpan

(dhum coming out from kwath) for nasal congestion & to see the efficacy of sadyasnehpan of warm Til tail in 30 children each of acute or chronic upper respiratory tract infection.

Objectives: To prevent susceptibility of upper respiratory tract infection. & improve immunity, allergy removal to stop recurrent infections

Material & Methods -

I. Inclusion Criteria

Patients of upper respiratory tract infection. of 0 to 5 years age group having clinical features of nasal discharge, congestion, dry

or cough with expectoration, tachypnoea, breathlessness, adventitious sounds, lack of appetite, Irritability, sleeplessness etc irrespective of their sex.

Exclusion Criteria -

The same age group & >5 yrs children suffering from secondary infection like fever, Otitis media, Pneumonia, Tonsilitis etc. were excluded from the study. Written informed consent was obtained from each & every patient of both the groups.

Withdrawal Criteria -

If in patients of both groups the clinical features would have aggravated into secondary infection & /or if they will be irregular in the decided course of treatment, such patients will be withdrawn from the study

Assessment criteria - All the patients were evaluated for -

- Subjective relief & tolerance to physical activities
- Objective parameter- ESR, Eosinophil, leucocyte count

Study design & duration :

An open ended randomized clinical trial, carried out in OPD/IPD of MGACHRC, Salod (H), Wardha.

In this study, total 60 patients having acute or chronic upper respiratory tract infection. in younger children

of 0 to 5 years age were divided into 2 equal groups of acute & chronic. No control group has added as it was a pilot study.

1. **Acute group-** Treated with Kasahar kwath, dhumpan, warm Til tail oral intake
2. **Chronic group:** Treated with same medication in the morning & evening at kaphkala as per age & severity. Chronicity was considered as >5 days upper respiratory tract infection.

Dose, anupan, duration & Follow-up :

Kasahar kwath was prepared fresh & warm with dhuppan & saindhav yukta Tiltail was given twice a day morning & evening, in 0-5 yrs age group for 1 week with lukewarm water for both groups

Dose-In 0-2 years age, 5ml warm kwath & tiltail,

In 2-5 years age, 10 ml warm kwath & tiltail with warm water anupan.

Trial yog-Kasahar kwath was made up of following ingredients

Ajwain, trikatu, haridra, Tulsi, Saindhavlavan, guda/jaggery,

Betaleaf / nagvel pan, equal parts & water to be added as decoction method but reduction proportion was kept more owing to younger children's Pediatric doses along with warm Tiltail (Sesamum oil)

Above drugs having Kaph-vatahar properties which help in treating upper respiratory tract infection.

Pathya of diet & daily regimen were suggested to both groups

Gradation for Clinical features

1. **Nasal discharge** - It was considered as mild, moderate, severe as per severity of complaints.

- **Mild** - Whenever discharge occurs intermittently off & on
- **Moderate** - Whenever discharge occurs morning & evening, night at kaphkal
- **Severe** - Whenever discharge run continuously.

2. **Cough (Dry/Wet) -**

- **Mild** - When it occurs intermittently off & on
- **Moderate** - Whenever it irritate child at morning, evening,

night at kaphkal

- **Severe** - Many times in a day.

3. **Breathlessness-**

- **Mild** - When it occurs intermittently off & on
- **Moderate**- Whenever it irritate child at morning, evening, night at kaphkal
- **Severe**- Many times in a day.

4. **Lack of Appetite-**

- **Mild**- Diet is slightly reduced
- **Moderate** - Diet is reduced to half or more
- **Severe** - Diet is drastically reduced with refusal to eat

Criteria for overall assessment of Results-

Assessment of Results was made with the help of subjective & objective parameters

Complete remission- total disappearance of SIGN & SYMPTOMS

Major improvement- Severity comes to mild

Minor improvement- complaints shift moderate to mild

Observation & Discussion

It was observed that maximum patients were belonged to 2 to 5 years age group. In acute group mild grade patients were maximum as compare to severe grade who were excluded due to high fever. Out of those 60 % patients got complete remission due to disappearance of disease but 40 % having low immunity with less adoption of pathya were shifted to moderate gradation. In chronic group patients, result of medication was more as compare to acute group. As per severity external snehan-svedan, matra basti with warm saindhav yukta tiltail was also used but no other medication

Comparison of parameters before and after treatment in acute group

Parameters		Mean	N	Std. Deviation	Std. Error Mean
Hb%	Before treatment	9.39	30	0.72	0.13
	After treatment	9.52	30	0.65	0.12
TLC	Before treatment	6258.33	30	781.69	142.71
	After treatment	6135.00	30	615.20	112.32
Neutrophils	Before treatment	57.96	30	5.05	0.92
	After treatment	56.10	30	5.71	1.04
Lymphocytes	Before treatment	32.53	30	6.48	1.18
	After treatment	31.76	30	5.59	1.02
Eosinophils	Before treatment	3.23	30	1.13	0.20
	After treatment	2.03	30	0.80	0.14
ESR	Before treatment	22.70	30	13.97	2.55
	After treatment	18.66	30	9.80	1.79

was used.

The Kasahar kwath is having tikta-katu rasa, teekshna, ruksha guna, ushna virya, katu vipak, vatakaafaghna properties. It was raw coarse powder given as per age, agni, severity up to continuous 1 week tds to be prepared at home to remain fresh, warm. Follow up was taken for next fortnight to check recurrence. Sadya snehapan & external snehan swedan with warm saindhav yukta Tiltail

pacifies bouts of dry cough, facilitates expectoration & provides instant relief. All patients were assessed by subjective parameters & objective by CBC. The patients whose CBC level was increased get reduced by Trial warm homemade kwath as all trial drugs are known immunomodulator, anti allergic in action It was seen that other patients CBC were moving within the normal range.

Student's paired t test of Acute group

Paired Differences						t	df	p-value
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Hb%	-0.12	0.31	0.05	-0.23	-0.00	2.16	29	0.038 S,p<0.05
TLC	123.33	405.08	73.95	-27.92	274.57	1.66	29	0.106 NS,p>0.05
Neutrophils	1.86	2.87	0.52	0.79	2.93	3.55	29	0.001 S,p<0.05
Lymphocytes	0.76	2.93	0.53	-0.32	1.86	1.43	29	0.163 NS,p>0.05
Eosinophils	1.20	0.84	0.15	0.88	1.51	7.76	29	0.000 S,p<0.05
ESR	4.03	5.57	1.01	1.95	6.11	3.96	29	0.000 S,p<0.05

Comparison of parameters before and after treatment in Chronic group

Parameters		Mean	N	Std. Deviation	Std. Error Mean
Hb%	Before treatment	10.62	30	1.38	0.25
	After treatment	10.93	30	1.50	0.27
TLC	Before treatment	7294.66	30	1406.38	256.77
	After treatment	6900.66	30	1119.82	204.45
Neutrophils	Before treatment	60.70	30	4.68	0.85
	After treatment	58.43	30	4.17	0.76
Lymphocytes	Before treatment	35.03	30	4.19	0.76
	After treatment	34.23	30	3.84	0.70
Eosinophils	Before treatment	3.33	30	1.32	0.24
	After treatment	2.33	30	0.84	0.15
ESR	Before treatment	23.03	30	9.16	1.67
	After treatment	18.46	30	7.53	1.37

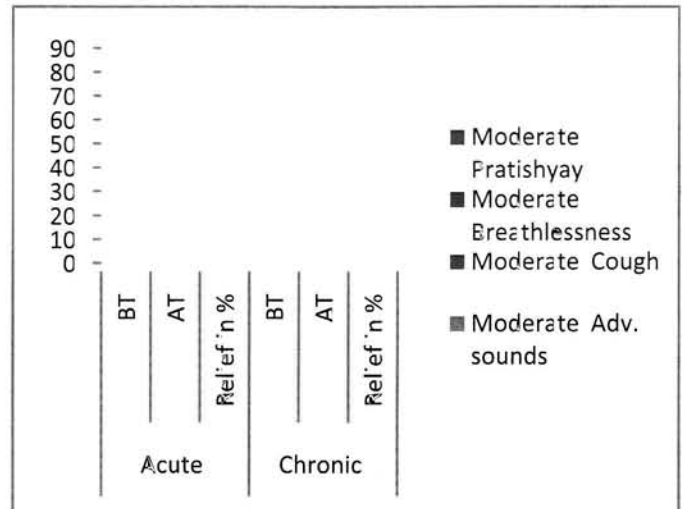
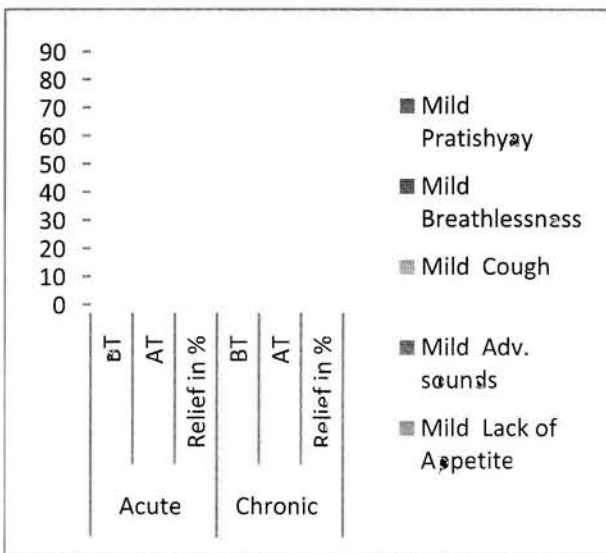
Student's paired t test of Chronic group

Paired Differences						t	df	p-value
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Hb%	-0.12	0.31	0.05	-0.23	-0.00	2.16	29	0.038 S,p<0.05
TLC	123.33	405.08	73.95	-27.92	274.57	1.66	29	0.106 NS,p>0.05
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Eosinophils	1.20	0.84	0.15	0.88	1.51	7.76	29	0.000 S,p<0.05
ESR	4.03	5.57	1.01	1.95	6.11	3.96	29	0.000 S,p<0.05

Table showing Clinical features of both groups with relief in %

GRADE	CLINICAL FEATURES	Acute			Chronic		
		B T	A T	Relief in %	B T	A T	Relief in %
Mild	Pratishyay	11	6	55.5	15	11	73.3
	Breathlessness	10	6	60	13	10	76.9
	Cough	12	7	58.33	14	12	85.7
	Adv. sounds	17	11	64.7	17	15	88.2
	Lack of Appetite	14	12	85.7	12	8	66.6

GRADE	CLINICAL FEATURES	Acute			Chronic		
		BT	AT	Relief in %	BT	AT	Relief in %
Moderate	Pratishyay	15	8	53.33	10	8	80
	Breathlessness	10	6	60	13	9	69.2
	Cough	8	4	50	11	8	72.7
	Adv. sounds	10	6	60	14	12	85.7
	Lack of Appetite	10	8	80	10	8	80



In severe grade patients who started worsening due to secondary infections & low immunity, irregular in pathya sevan were excluded from the study. Sadya snehan with warm tiltail, Matrabasti, snehan-svedan, dhumpan of kwath & frequently warm intake of Kasahar kwath help in treating upper respiratory tract infection.

Conclusion-

It is found that trial kwath with sadyasneh is very effective in acute & chronic kasa without S/E due to ushna, teekshna, katu-tikta rasatmak act as a good kaf-vathar has ability to stop sign & symptoms of acute & chronic upper respiratory tract infection. with shoth-shoolher, deepan, pachan effect & no any side effect .The ingredients may be collectively effective on airflow obstruction by bronchodilator, anti-inflammatory, antihistaminic properties.

- “ In Chronic group subjective as well as objective results were significant as compare to acute group
- “ kwath yog shows immunity modulator, allergy removal, kasahar effect.
- “ Multiapproach is necessary in severe grade pts. i.e. snehan-svedan, matrabasti, pathyasevan, repetition of dose a/c to severity.

Thus trial yog is statistically significant, safe, effective & well accepted with easy availability. Further double blind

comparative or placebo controlled study in a higher population is recommended

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A Short Study on Pharmaceutical Preparation & Clinical Evaluation of Phalavarti (Gudavarti) in Malavrodha (Constipation)

Dr. Bharat Rathi

Associate Professor, Department of Rasa Shastra & Bhaishya Kalpana,
Mahatma Gandhi Ayurveda College Hospital & Research Centre, Salod (H) Wardha 442004
E-mail – bharatrathi174@gmail.com

Abstract

Constipation is one of the leading problem among the population. Adopting modern life styles & mental stress are leading causes for constipation. No. of medicines are advised to relieve constipation. But due to the nonpalatability, most of the patients dislike the formulations & neglect to take regularly & hence their problems remain untreated. For this purpose Phalavartis are mentioned. It can be easily administered to children, old persons & all those who cannot swallow the drugs easily. Hence keeping this advantage in mind Phalavartis were prepared & tested on patients.

Key words : Constipation, Phalavarti

Introduction

Varti is similar form of vati Kalpana. The difference is in shape & use. For making varti medicine is modified into yavakriti (long & oval shape) solid form. Then it is called as Varti Kalpana. In the text, the use of Varti is mentioned for local administration of the various routes viz. Guda (anus), Yoni (Vagina), Sishna (Penis), Netra (eye) etc. According to the specific route, the length & diameter of the varti is modified. Phalavarti is mentioned for the purpose of vatanuloman as well as to evacuate sanchit doshas (Mala, Mutra, Purisha, Rakta, Kapha etc) from the body.

Suppositories, according to modern pharmacy, are shaped dosage form of medicament for insertion into the body cavities other than mouth.

Constipation is defined as delay or difficulty in defecation, causing significant distress to the patient. It is characterized by infrequent bowel evacuations, hard small faeces with painful defecation. It can be divided into organic or nonorganic / functional constipation. Only 5-10% patients have an organic cause for it & 90-95 % patients have no biochemical, pathological abnormalities are identified. Many of these pts have non organic or functional constipation resulting from intentional withholding of stool due to following various causes

- i. Vitiation of Apanvayu – The stool becomes hard & there is difficulty in evacuation.
- ii. Problem related – Malashaya – This is called as Kroor kostha (slow movement of intestine) which is an attribute of Vataprakriti.
- iii. Malasanga – Faeces remain in the channel only due to the problems in the bowel movements.

Vitiation of vata is mentioned due to the following causes

- a) Dietary (Aahar) - Astringent, Pungent, & Bitter food, repeated food intake or total fasting.

- b) Habbits (Vihar) - Keeping awake late night, sleeping during day, mental stress, holding the natural urges.

The causes responsible for Pureeshkshaya (decreases formation of faeces) are –

- a) Liquid diet
- b) Eating very less quantity of leafy & green vegetables.

Due to the above reasons constipation is developed.

Roop (Signs & Symptoms)

There are three types of symptoms:

- i. Pathology in karmendriya e.g. fissures, fistula, pain in abdomen, itching of anus etc.
- ii. Improper stool formation: distension of abdomen, foul smelling stool, sticky stool, loss of appetite, headache.
- iii. Decreased formation of stools, Distension, formation of gases, chest pain.

Chikista : In Ayurvedic texts, number of formulations are mentioned for treating constipation. But due to the nonpalatability, most of the patients dislike the formulations & neglect to take regularly & hence their problems remains untreated. For this purpose Phalavartis are mentioned. It can be easily administered to children, old persons & all those who cannot swallow the drugs easily.

Aims & Objectives:

- I. Pharmaceutical preparation of Phalavarti
- II. To assess the efficacy of Phalavarti in constipation.
- III. To assess the time required for action of Phalavarti.

Materials & Methods:

- This was randomized clinical study.
- It was conducted at MGACHRC Salod (H).
- OPD & IPD patients were taken for the study.
- Total 30 patients were taken for the study. i.

- Inclusive criteria: patients suffering from constipation, patients suffering from constipation with non bleeding piles, age group from 20 yrs. to 70 yrs.
- Exclusive criteria: Known cases of Intestinal obstruction, rectal stenosis, fissure, bleeding piles, pregnancy, rectal carcinoma.

Phalavarti (Gudavarti):

मदनं पिप्पली कुष्ठं वचा गौराश्च सर्षपः ।
गुडक्षार समायुक्तः फलवर्ति रिहोच्यते ॥ भै.र. 31/10

S.N.	Name of drug	Latin name	Rasa	Guna	Virya	Vipaka	Action on dosha
1.	Madanphal	Randia dumentorum Lam	Madhura Tikta	Laghu Sukshma Ruksha	Ushna	Katu	Kaphavatahara
2.	Pippali	Piper longum Linn	Katu ,Tikta	Laghu Snidha Tikshna	Ushna	Madhura	Kaphavatahara
3.	Kustha	Sauseria luppa C.B.Clark	Tikta Katu Madhura	Laghu Ruksha Tikshna	Ushna	Katu	Kaphavatahara
4.	Vacha	Acorus calamus Linn	Katu Tikta	Laghu Tikshna Snidha	Ushna	Katu	Kaphavatahara Pittavardhak
5.	Shwet Sarshap	Brassica Campestris Linn	Katu Tikta	Snigdha Ruksha	Ushna	Katu	Kaphavatahara Pittavardhak
6.	Guda	Jaggery	Madhura	Ruksha Raktnapras adana	Ushna	Madhura	Vatapittahara
7.	Yava Kshara	Potassium Salts	Katu	Ushna Snigdha Sara	Ushna	Katu	Kaphavatahara Pittavardhak

Method of preparation

- Drugs 1 to 5 were finely powdered.
- Jaggery was dissolved in water & boiled to thicker constituency on moderate fire.
- The powders were mixed in gudapaka & pestle to fine paste till moisture is dried up.
- Then vartis were prepared, dried in shade & preserved in an air tight container.

Mode of application :

Gudavarti was inserted to the rectum of diagnosed patients of constipation by applying little oil at anus & at the tip of varti. Time period was noted.

Assessment criteria:

- Subjective parameters were assessed for Phalavarti's local action to see whether constipation was relieved or not.
- The period of medication was assessed according to its action till constipation was relieved. If not relieved, varti was inserted again on the next day. Varti was used maximum up to three days if constipation did not relieve.

Observation & Results:

Table 1 : No. of patients according to age & Sex .

S.N.	Age Group	Male	Female
1.	20-30	01	02
2.	31-40	00	01
3.	41-50	03	02
4.	51-60	06	04
5.	61-70	09	02
	Total	19	11

Table 2: Population according to Desh

S.N.	Area	Male	Female
1.	Rural	08	06
2.	Urban	11	05
	Total	19	11

Table 3: Time duration of evacuation after Varti insertion

S.N.	Time → Age	10-20min	21-30min	31-40min	41-50min
1.	20-30 ↓	02		01	
2.	31-40		01		
3.	41-50	02	02		01
4.	51-60	05	02	03	
5.	61-70	04	03	03	01
	Total	13	08	07	02

Table 4: Satisfactory/Unsatisfactory evacuation

S.N.	Results	Total
1.	Satisfactory	25
2.	Unsatisfactory	05
	Total	30

Chi square test = 13.33

D.F. = 1

P value = 0.0002

Table 5: Frequency Table

S.N.	Duration	Frequency	Percentage
1.	Below 20 min	13	43.33%
2.	21 to 30 min	08	30.00%
3.	Above 30 min	09	26.67%
	Total	30	100.00%

Mean evacuation - 25.2 min, S.D. – 11.48 min, Mode - 15 min

Discussion

1. Total 30 patients suffering from constipation were treated with Phalavarti among them 19 were male & 11 were female.
2. Constipation was found more in male patients may be due to irregular dietary habits, mental stress etc.
3. Patients from rural & urban are equally suffered with constipation may be due to acquiring modern life style & irregular dietary habits.
4. No. of patients suffering from constipation were more (total 26) in 40 to 70 age group may be due to vat predominance in this group.
5. Phalavarti showed the significant effects in 25 patients out of 30 in relieving the constipation (Table no.4)
6. The mean duration of evacuation time was 25.2 minutes (+ S.D. 11.48 min) the maximum patients (total 22) took the evacuation time in between 20 to 30 min.
7. Chi square test showed the significant result as $p < 0.05$ at 5% level of significance.
8. Phalavarti showed unsatisfactory results in 5 patients. Among them 3 patients were having the history of no bleeding piles & they started burning sensation after the insertion of varti. In remaining two patients varti was came out along with alpa

mala. Next day the varti was inserted in these two patients and found satisfactory evacuation.

Conclusion

This study showed the statistically significant results in relieving constipation by using Phalavarti. As this was a preliminary study, further trial on large sample is required for confirmation of results.

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Anatomical Study of Mūtravaha Srotasa with special reference to Mūtrakruhha

Dr. Gaurav R. Sawarkar,

Assistant Professor Department of Rachana Sharir

Mahatma Gandhi Ayurveda College Hospital & Research Centre, Salod (H) Wardha 442004

E- mail :- drsawarkar.gaurav@gmail.com

Abstract

Āyurveda is regarded as the most sacred in the circle of Vedic scholars. The reason is that *Rigveda*, *Atharva veda* etc. deal with the matter related to the other world whereas *Āyurveda* deals with *Āyu*, the means for health and virtue which is useful for both the words, here and hereafter. (Ch.Su.1/43). The physician knows the every aspect of the *Śārīr* and related all the diseases who can't fail during the treatment.(Ch. Vi.5/30).For the treatment of human body some critical concepts are not solved upto the date in ayurveda text. To explain the basic concept of Mutravaha srotas in sight of disease entitling retrospective study was done in this paper.

Keywords :- Mutravaha srotas, Śārīr

Introduction

Racanā Śārīr is one of the basic subject for the principles of *Āyurveda*, which is concerned with the structural aspect.

In *Racanā Śārīr*, concept of '*Srotasa*' is of very great importance as a structural aspect, it means channel or system in which some tissue or other material is formed, secreted or transported.

Srotasa are minute capillary like body constituents which carry/flows the *rasa dhātu* within. (Su.Sha.2/13)

Mulasthān of *Srotasa* is the site of formation of body constituents and which regulates main activity of *Srotasa*. (Ch.Vi.5/8)

So, according to *Caraka Mulasthāna* of *Mūtravaha Srotasa* are – *Basti* and *Vankshana*.

According to *Suśruta Mulasthāna* of *Mūtravaha Srotasa* are *Basti* and *Medhra* (Ch.Vi.5/5). According to *Caraka Mulasthāna* of *Medovaha Srotasa* are *Vrukka* and *Vapāvahan*(Su.Sha.2/13). According to *Suśruta Mulasthāna* of *Medovaha Srotasa* are *Kati* & *Vrukka* (Ch.Vi.5/4). As per the modern science the organs included in urinary system are Kidney, Ureter, Bladder and Urethra. (Su.Sha.9/13)

While describing *Srotasa ācārya* has mentioned about *Mulasthāna* of *Srotasa*. But other organs (except *Mulasthāna*) involved in those *Srotasa* are not mentioned clearly in *Āyurveda* context and the pervasion (*vyāpti*) of *Srotasa* is not explained in detail. It is a need of recent era to make demarcation of the organs of *Srotasa*. Being to demarcation one can differentiate affected organ in *srotodushti*. For example, Lung disorder: In which *Srotasa* it will be included and treated? Like that other points will be cleared from demarcation.

In description of the *Mulasthāna*, "Raktavahi Dhamanya:" is common to both, *Raktavaha* & *Mansavaha Srotasa*. So, one organ (*Mulasthana*) can be included in two *Srotasa*. In the

disease, a particular organ is involved. In which *Srotasa* that will be included and same as during treatment. For that study *Mūtravaha Srotasa* and *Mūtrakruhha* disease, were studied in different ways.

The *Carakācārya* has given following context-For shed light on the affected organs and to recognize the pervasion (*vyāpti*) of *Mūtravaha Srotasa*, the topic has selected for dissertation. (Ch.Vi.5/27)

Aim and objectives

❖ Aim

- * To study the affecting organs in *Mūtravaha Srotasa* in *Mūtrakruhha* vyadhi with applied aspect of *Śārīr Racanā*.

❖ Objectives

- * To study the *Mūtravaha Srotasa* in detail.
- * To study concept of *Mulasthāna* in detail.

Material and methods

Material & methodology used for the study is as follows,

The present study was conducted grossly at two stages,

1. Literary study
2. Clinical study

1) Literary study:-

A) Material & Methodology

Literary review of the *Āyurveda*ic aspect yadhi done from all

available *Āyurveda*ic text. Tika related to topics were discussed in detail.

Literary review+ of Urinary was done in detail.

Related articles in various magazines were reviewed.

To compile various references of the topic like Urinary system disease, prevalence, etc. net browsing was done.

Dissection of the kidney was done.

2) Clinical Study:-

Clinical study was conducted at 4 levels. The study was based on clinical observations.

A) Material: Diagnosed 50 patients of *Mūtrakruhra* were selected for the study.

B) Methodology

- **Level 1:-** Plan of work was approved from Institutional Ethics committee.
- **Level 2:-** Dissection was done to study the anatomy of Urinary system and record the cases required for the study.
- **Level 3:-** Total 50 patients of *Mūtrakruhra* were selected according to inclusion and exclusion criteria as follows,

Inclusion Criteria :

Diagnosed patients of *Mūtrakruhra* from OPD of our hospital were included in the study.

Exclusion Criteria :

1. Patients having any Neurological problems.
2. Hypertension
3. H/O Nephrotoxic Drug & Case of Poisoning.
4. Pregnant Woman.
5. Age of Patients- Below 18 yrs and Above 70 yrs.

Patients of above criteria were excluded in the clinical study.

- **Level 4:-** Assessment of all diagnosed cases had done according to the following assessment criteria.

According to inclusion criteria 50 patients were enrolled for this study. The subject undergoing this study had informed about the nature of study and written consent from each subject was taken.

Observations

Observations of all 50 patients had selected according to the inclusion criteria and assess according to assessment criteria with investigation which were presented here in tabular and graphical form.

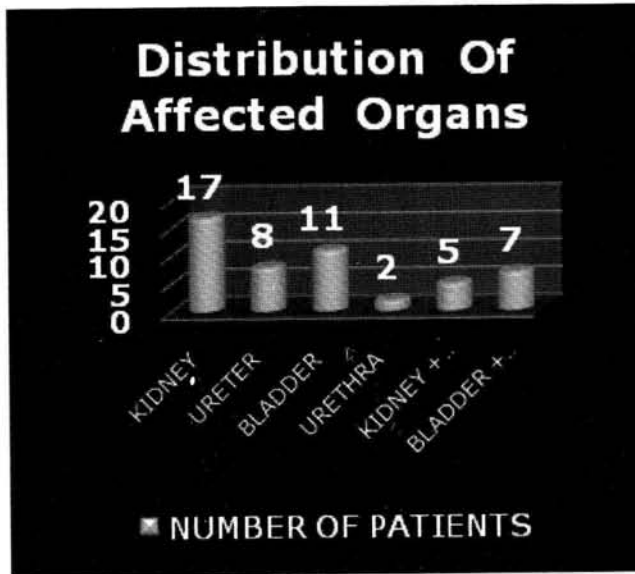


Table No.1: Distribution of affected organs

Organs	Number of patients
Kidney	17
Ureter	8
Bladder	11
Urethra	2
Kidney + ureter	5
Bladder + urethra	7

CONCLUSION

Vrukka & *Gavini* should be included in *Mūtravaha Srotasa*. *Vrukka* should be considered as a *Mūlasthāna* of *Mūtravaha Srotasa* in place of *Basti*. Description of *Mūtra* path by *Suśruta* is found to be similar to Ureter.

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Concept of Physiology of Central Nervous System in Ayurveda.

Alka Rawekar,

Assitt. Professor, Department of Physiology, JNMC Sawangi, Meghe Wardha.

Email :- alkarawekar@yahoo.com

Akshata Mulmule

Resident first year, JNMC Sawangi, Meghe Wardha

Email :- drakshatamulmule@gmail.com

Priyanka Gupta

Assitt. Prof., Department of Prasuti Tantra & Stri Roga

Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha, Maharashtra

Email :- priyanka7.bhu@gmail.com

Abstract:

'Human Physiology', is the study of functional aspects of human body, designated by the term 'Vicaya' in Ayurvedic literature. The word 'Vicaya' means the special or detailed knowledge. 'Śarīra Vicaya' in Ayurvedic represents both Anatomy and Physiology of human body. It was observed that most of the Ayurvedic concepts are similar to human physiology however some concepts like 'Ātmā', 'Manas' and 'Prakṛti' are unique to Ayurveda. Three 'Doshas' i.e., 'Vāta', 'Pitta' and 'Kapha' in general, represent neural, endocrine and immune mechanisms respectively and form the basis of neuro-immuno-endocrinology. The state of equilibrium among these 'Doshas' is responsible for maintenance of health.

Key Words: Vata, central nervous System, physiology.

Introduction:

"It is a global experience of becoming conscious which nature has lain upon mankind and which unites the most diverse cultures in common task."

Ayurveda is a medical science developed from Indian heritage to make people healthy in natural way. Its origin is postulated to near 100 millions of age. It is a comprehensive system that places equal emphasis on body, mind and spirit. It mainly strives to restore the innate harmony of individual. It is not only about treating sickness but preventing disease and enhancing health, longevity, vitality and happiness are also equally important aspects.

The basics of Ayurvedic medicine (traditional Indian medicine) are set down in a few ancient texts, of which the *Charaka Samhita* is the principal resource. "The *Charaka Samhita* stands as the finest document of the creative period of ancient Indian medicine (600 B.C.-200 A.D.), in regard to the extent of its contents and to the state of its preservation...Charaka is the most rewarding author among the writers of classic medicine..."

Theory of 'Tridoṣa':

Tridoṣa Ayurved is based on three aspects.

Vata- mainly the nervous tissue (also the factor responsible for maintaining Pressure of system that is our body). Further divided into five types.

Pitta- mainly the Enzymes that constitute our body (temperature). Further divided into six types

Kapha- mainly the tissue part of our body, (other than nervous

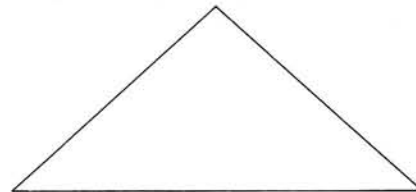
tissue) that is immunological cells (Mass). Further divided into five types.

Vata basically deals with kinetic energy, movement, division and growth. Pitta with the thermal energy by heat generation, intellect, sight; while Kapha with potential energy, immunological functions, nourishment, lubrication etc.

This theory forms the basis of Ayurvedic physiology, pathology and pharmacology. Though, the term 'Doṣa' means 'the disturbing factor', it has got definite physiological importance in normal state. Disease is manifested as a result of disturbance in the state of equilibrium among these 'Doshas'. Their balance state is health while imbalance means disease.

Molecular basis of Tridoṣa:

VATTA (pressure) (Ca^{+} , O)



PITTA (temperature) KAPHA (mass) (K^{+} , C)
(Na^{+} , H)

[Index: Ca^{+} - Calcium, O - Oxygen, Na^{+} - Sodium, H - Hydrogen, K^{+} - Potassium, C - Carbon]

Thus the three constituents of tridoṣa are formed by basic elements of nature which further helps in explaining the

pathways of various natural as well as diseased processes.

Physiology of central nervous system:

All movements are due to 'Vāta' and that is why it is called the 'Prāna' of all living beings. (Ca. Sū. 18/118). So, 'Prānavaha Srotas' stands for the system concerned with the activities of 'Vāta'. 'Prānavaha Srotas' stands for the system that transports a specific type of 'Vāta' called 'Prāna Vāta'. This is a special Srotas meant for a special type of 'Vāta'

Brain and Brainstem:

Siras (Head) is compared with sun and sensory and motor nerves to sunrays. "Bhela" has explained that the mind is situated in between the head and palate. The efficiency of mind is beyond any other sensory or motor organ (Bh.Ci. 8/2-3).

Functions of Vata:

1. Vata is powerful and important because of its control over the functions of body.
2. "sukshma" it means capable of quickly transferring through all the minute channels of body.
3. "Amruta" that is invisible, not in corporeal form, it is an energy; as it is invisible so not perceived by any of sense organ.
4. "Avasthita/ Chalatwa" it is mobile; conducted in single direction from neuron to terminal end.
5. "Swayambhu" it is self originated and propagated; that means in originated from brain to nerve.
6. "Gati and Gandhana" it has both motor as well as sensory function. Any obstruction called as "Avyahagati" in its movement leads to pathological function.
7. "Shighragati" it has swift and fast movement with high velocity (> 100m/s)

Types of 'Vāta':

All functions of nervous system in human body are represented through 'Vāta' in Ayurveda.

'Vāta' is divided into five sub types - 'Prāna', 'Udāna', 'Samāna', 'Vyāna' and 'Apāna'. Based on this subtype of 'Vāta', 'Prānavaha Srotas' has derived its name.

1. 'Prāna Vāta': This is situated in head and controls a region covering neck and chest. It is responsible for functions such as intellect, smell sensations (olfactory), visual (optic, oculomotor, trochlear, abducent), hearing (Auditory), sensations over face (sensory part of Trigeminal and facial), inspiration, belching, deglutition (branches of vagus), control over thoughts in mind. Thus briefly it is clear that Prana Vata covers major functional part of central nervous system.

2. 'Udāna Vāta': Its active site is chest region. It covers the spinal nervous fibres from region of nose, throat and chest (C₃-C₁₂). It is basically responsible for production of speech by controlling glottis function, articulation that is intensity of speech, maintaining

enthusiasm and strength for oxygenation and deoxygenation at time of respiration, Memory.

3. 'Samāna Vāta': Active site of 'Samāna' is adjacent to gastro intestinal tract. Food once digested enters the gut where digestive enzymes are released, undigested food is separated and fecal matter is formed. All these functions are either those of parasympathetic nerves supplying the gut, branches of vagus or those of enteric nervous system.

4. 'Vyāna Vāta': The active site of 'Vyāna Vāta' is Heart. The blood circulates in the body

by continuous heart movements. So sympathetic, parasympathetic and Vagal control of heart is indicated by 'Vyāna Vāta'.

5. 'Apāna Vāta': This is active in pelvic region. It indicates Lumbosacral plexus control in this region. Its main functions are Defecation, Ejaculation, urination etc.

Regulation of digestion by Central Nervous System :

The food is brought towards the gut through 'Prāna Vāta'. Then, various fluids make it's bonds loose, acts on it and make the food is soft, digestible. Then the 'Samāna Vāta' stimulates 'Jatharāgni' by stimulating gastrointestinal cells.

Regulation of Respiration by Central Nervous System:

'Prāna Vāta' situated at 'Nābhi' ('a center'), consumes nector from atmosphere nourishes Jiva / Rakta. Site of 'Prāna Vāta' is described to be 'head'. So, this is indicative of a particular center in the head.

Regulation of Reproduction by Central Nervous System:

Erection requires parasympathetic stimulation whereas ejaculation is dependent on sympathetic one. Also, ejaculation is brought about by 'Apāna Vāta', which represents the sympathetic activity.

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The Concept of Severe Psychoses in Ayurveda

Prakash B. Behere,

Director Research & Development

Professor & Head Dept of Psychiatry DMIMS, Sawangi Meghe (Wardha)

Email:- pbbehere@gmail.com

Sundar Singh Danga

Research Fellow, Dept. of Psychiatry, MGIMS, Sevagram

Email :- sunder147@gmail.com

Abstract:

In Ayurveda, the description of the Psychiatry and its various disorders are described in *Bhutvidya*- a special branch of *Ashtang Ayurveda*. Ayurveda also emphasizes our mind to be of more importance than the body in the body-mind apparatus. Ayurveda also says that negative feelings are emotional toxins. If they are not driven out of the body in a stipulated time, they give rise to chronic mental disorders like anxiety, neurosis, depression etc. If this is further ignored, it turns into permanent disorders like Unmad (Psychosis), *Apasmar* (Insanity) etc. Ayurvedic medicine is a holistic system of medicine that treats mental disorders from mild to severe condition, including insanity (psychosis). Ayurveda removes such psychological disorders by "spiritual therapy" known as Psychotherapy (*Satwawjay Chikitsa*).

Keyword: Ubhayendriya, Unmad, Apasmar (epilepsy), hallucinations, Charaka Samhita, nidansthan, Attattvabhinivesa, Pradnyaparadha, Insanity, dohas vata, pitta & kapha, Manovaha shrota., etc.

Introduction

Ayurveda is regarded as "The Science of Life" and it is one of science that well describes the care of physical, mental and spiritual health of human being. Human Life according to Ayurveda is a combination of senses, mind, body and soul. Ayurveda has described the special status to *ubhayendriya* (organ of both perception & action; mana/ mind). Ayurveda also emphasizes our mind to be of more importance than the body in the body-mind apparatus.

When the mind is in good & balanced state, it generates positive feelings like those of love and affection. In the contrary, if the mind is not healthy & affected with some negative thoughts then the body-mind apparatus gets imbalanced. Due to improper diet and actions, the natural state of the mind is disturbed and the positive feelings are driven out. They then give place to negative feelings like those of anger, jealousy, cruelty, drowsiness which further lead to mental disorders.

Ayurveda also says that these negative feelings are emotional toxins. If they are not driven out of the body in a stipulated time, they give rise to chronic mental disorders like anxiety, neurosis, depression etc. If this is further ignored, it turns into permanent disorders like *Unmad*; unreasonable and irrational state of mind like hysteria. *Apasmara* (epilepsy) is also categorized as a mental disorder. As for the cause, Ayurveda mentions improper diet, actions committed in this birth, bad deeds done in the last birth, physical illness, over indulgence in sex, severe stress, unfavourable environment etc. All these hamper the natural vitality of a person and lead to disturbed health. A person suffering from mental disorders becomes incapable of conducting himself/herself

according to situational demands and social norms. Person has visual or aural hallucinations instead of coherent thoughts. Social withdrawal, antisocial behaviour or extreme violence on the personal, family or social level is seen commonly. A few physical symptoms like tremors, irregular eyeball movements, oblivion of one's own body, excessive perspiration and salivation may accompany these behavioural aberrations. All the in-between stages like diverting attention, distracting attention etc. are seen in various mental or psychosomatic disorders. Purposeless movements or compulsive, obsessive movements can also be observed at times.

In addition to the Primordial cause of disease, the *Charaka Samhita* considers three important factors in the causation of disease.

"Asatmyendriyarthasamyoga"

(unwholesome contact of sense organs, with objects of incompatible physical, verbal, or mental activities), the unwholesome conjunction with the objects of their affection. Pradnyaparadha (volitional transgressions), the failure of intellect, or crimes against wisdom. Parinama (time factors, including chronobiological errors, seasonal variations), transformation or decay due to time and motion."

Mental Illness The major categories of mental diseases are neuroses or Chittodwega (anxiety disorders), Unmad (psychoses), Apasmara (convulsive disorders, epilepsy) Attattvabhinivesa (obsessive disorders), while Mada (intoxication), Murcha (syncope) and Sanyasa (coma) are considered to be psychosomatic disorders.

According to the Asthanga-Hridaya of Vagbhata insanity is a toxicity / disorder to the mind caused by dohas vata, pitta & kapha.

Which are vitiated by some hetus(causative factor).It also said that having unhealthy foods which are spoiled, unaccustomed, contaminated and using (food and drinks) improper & abnormal manner i.e. Virudhhaanna, those who are depressed due to worry, grief, etc.), who is weak mind (Hinsatwa)due to the effect of sudden increase of disease, emaciated persons indulging in activities in improper ways, doing mistakes in the method of worship, by doing sinful acts, loss of balance of mind, by the effects of strong poisons or weak poisons due to these reasons the doshas getting increased in the mind in persons of delicate mind produces vitiation of the mind, and invading the manovaha shrotas channels Of the mind/ caused insanity". All these causes the intelligence, understanding, and memory to go astray. Because of that, the body loses any sense of joy or sorrow, and wanders about purposelessly like a chariot which has lost its driver".

The aggravated dosha(s), vitiate the hridaya (heart), the seat of the buddhi (mind), invading the Manovaha shrota (channel of the mind) bringing about the inability to make right choices, discriminate between right and wrong, with impairment in cognitive functions. Unmada, "insanity is characterized by the perversion of the mind, intellect, conscience, behavior and conduct," defined by Charaka, in the Charaka Samhita. According to Charaka, there are five types of Unmada: vata, pitta, kapha, sannipatika (combined vitiation of all 3 doshas) and exogenous. Sannipatika is considered incurable. Exogenous insanity is different from the insanity caused by vitiated doshas and is believed to be caused by karma.

In Charaka Samhita, in Nidanasthana Chapter 7, and describes the eight essential psychological factors which affect all psychiatric disorders. These psychiatric factors are: "Mana (emotion, mood, affect), Buddhi (thought and discussion), Sandnyadnyana (orientation), Smriti (memory and learning), Bhakti (desire), Sheel (habits), Chesta (psychomotor function), and Achara (conduct and behaviour)".

Ayurvedic medicine is a holistic system of medicine that treats mental disorders from mild to severe condition, including insanity (psychosis). "Ayurveda removes such psychological disorders by

Panchkarma measures and spiritual therapies including meditation, pranayama, mantra, prayers, visualizations, and rituals called "spiritual therapy" known as Psychotherapy (*Satwawjay Chikitsa*).¹ Ayurveda is not only limited to body or physical symptoms but also gives a comprehensive knowledge about spiritual, mental and social health. Thus Ayurveda is a qualitative, holistic science of health and longevity, a philosophy and system of healing the whole person, body and mind. The perfect balance of mind, body and soul is considered as complete health in Ayurveda. The concept of Mind in ancient India had been since prevedic period. Mind has been conceived to be functional element of 'ATMAN' (Soul) which described in Vedas –earliest written script of human race.

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Pedunculated Wart Excision By Ksharsutra

Kiran B. Khandare

Reader, Dept. of Shalyatantra,
M.G.A.C.H & R.C, Salod (H) (H), Sawangi, Wardha- 442 004
Email :- kbkhandare@gmail.com

Subhash Chandra Varshney

HOD Shalya Tantra- M.G.A.C.H & R.C,
Salod (H) (H), Sawangi, Wardha- 442 004
Email :- scvbhu@gmail.com

Abstract

Warts are small skin growths caused by the Human Papilloma Virus (HPV), which infects the upper layer of skin. A wart's appearance varies with its location and the type of virus that has caused it. Ksharsutra is very effective in many surgical disorders. Ksharsutra is a medicated thread especially made up of Ayurvedic medicinal plants. In this case Ksharsutra is used to excise pedunculated wart. Antibiotic and analgesic are not used. Complete recovery resulted after complete excision with Ksharsutra.

Keywords :- Warts, Human Papilloma Virus, Ksharsutra, Pedunculated wart

Introduction

Warts are small skin growths caused by the human papilloma virus (HPV), which infects the upper layer of skin. The wart virus can be transmitted from one individual to another either by direct contact, or indirectly when both people come in contact with a surface, such as a floor or desk. People may come into contact with HPV by walking barefoot in public places, such as

gyms and shower floors. HPV also can be transmitted in the same person from one spot on the body to another. It is easier for HPV to infect a person when the person's skin is scratched or cut.

Warts can appear at any age but are more common in older children and are uncommon in the elderly. A wart's appearance varies with its location and the type of virus that has caused it. For example,

flat warts commonly appear on the face, neck, chest, forearms and legs. Most warts go away after a year or two, but some last for years or come back after going away.

Warts can itch or bleed. When warts are located in areas that are rubbed against clothing or bumped frequently, they can become irritated and the skin around them can become painful.¹

Ksharsutra

Ksharsutra is very effective in many surgical disorders. Ksharsutra is a medicated thread especially made up of Ayurvedic medicinal plants. Generally Ksharsutra is used in the management of Fistula in Ano.

In this case Ksharsutra is used to excise pedunculated wart².

Symptoms

There are two types of warts seen most often are common warts and plantar warts.

- **Common warts** have a rough surface and well-defined

borders. They are round or irregular in shape and usually range from 2 millimeters to 10 millimeters wide. Common warts are firm and can be light gray, flesh-colored, yellow, brown or gray-black. They occur most often near the fingernails and on the backs of the hands, but they also can appear on the elbows and knees.

- **Plantar warts** appear on the bottom (sole) of the foot. They are flattened by the pressure of standing on them and can be dotted with tiny, clotted blood vessels that look like dark pinpoint. Plantar warts often are painful, especially when they're on a weight-bearing part of the foot.

Other types of warts include:

- **Genital warts** appear on and near the genitals, as well as inside the vagina and on the cervix in women.
- **Cervical warts** appear on the cervix and sometimes develop into cervical cancer.
- **Mosaic warts** appear on the feet. They are groups of many small, closely set plantar warts.
- **Filiform warts** appear on the eyelids, face, neck or lips. They are long, narrow growths that usually grow straight out from the skin.
- **Flat warts** appear on the face and along scratch marks. They are smooth, flat-topped, yellow-brown papules and are more common in children than in adults.
- **Pedunculated warts** appear on the head and neck, scalp and beard and are shaped like cauliflower.

Diagnosis

A wart usually can be diagnosed by clinical examination.

Sometimes will have to take some tissue from a wart and analyze it under a microscope³.

Treatment

Most warts depart within a year or two, even if they are not treated; however, without treatment warts may spread. Treatment depends on the site of the wart, its type and size, a person's age and health, and his or her readiness to follow through with repeated treatments

- Salicylic acid can decrease the size of a wart, but they should not be used on the face or genitals.
- Wart may be treated by applying certain medications or acids, freezing it (cryotherapy)
- Surgical removal. Treated by Ksharsutra-
In this case Pedunculated wart was ligated by Ksharsutra.
*In this case antibiotic and analgesic are not used.



1. Photo before treatment



2. Ligated by Ksharsutra (Day 1st)



3. Photo After 4th Day 2nd Ksharsutra applied



4. Photo after 7 day



5. Photo 8th day



6. Complete excision on 9th Day



Complete recovery

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Vitiligo And Ayurveda Management – A Case Report

Anuradha Khandekar

Assistant Prof. Ayurveda, MGIMS, Sevagram

E-mail:- anurdhakhandekar@mgims.ac.in

Sundar Singh Danga

Research Fellow, Dept. of Psychiatry, MGIMS, Sevagram

Email :- sunder147@gmail.com

Abstract:

In Ayurveda 'Shwitraroga' is described in kushtha-vyadhi chikitsa which is similar to vitiligo. Vitiligo is a specific, often heritable, acquired, disorder characterised by well circumscribed milky white cutaneous macules devoid of identifiable melanocytes. A 6 yr. Old male child came to Ayurveda OPD with history of white macule patch (measure 4.5 cm x 3cm) over frontal bone.

He treated with 'Raktamokshan Chikitsa'(type of panchkarma), 'Lepana chikitsa', and internal Ayurvedic medication (Abhyantar Chikitsa). He got significant result.

Key words: Shwitra, Raktamokshan Chikitsa, Lepana chikitsa, Abhyantar Chikitsa



Photographs : A



Photographs : B



Photographs : C



Photographs : D

a- before treatment, b- after two month of treatment, c- after four months of treatment, d- after six months of treatment

Introduction:

In Ayurveda 'Shwitraroga' is described in kushthayadhi chikitsa which is similar to vitilig. Vitiligo is a specific, often heritable, acquired, disorder characterised by well circumscribed milky white cutaneous macules devoid of identifiable melanocytes. Across the globe, vitiligo is a relatively common cause of leucoderma, incidence is between 1%to 2%. Vitiligo appears to be observed more commonly in sun-exposed areas and in darker skin types.

Vitiligo may develop at any age, onset has been reported from birth to 81 yr of the age. Congenital vitiligo is very rare.

Although vitiligo is generally recognised as a single entity, etiology is complex. There appears to be a certain genetic predisposition and a number of potential precipitating causes. Vitiligo patients often can attribute the onset of their disease to a specific life events, crisis or illness. In some cases onset follows a physical injury, many patients related onset to sun exposure. The exact genetic defects in vitiligo remain to be elucidated and the vitiligo susceptibility genes have not yet been identified. ,

According Acharya Charaka shwitraroga is caused by sour,

salty, hot foods, viruddhahara, navanna dhanya, addyashana, asatmyasevan, divaswap, daily alcohol consumption, improper exercise, papkarma, krutagnabhav, guruninda, purvakrut karma. In the Charaka it says the three vitiated dosha mix with the dhatus, namely the rasa, rakta, mamsa, medas, and result in the white patches. "Ayurveda maintains that leucoderma is caused by some morbidity of the liver" which is a vitiation of pitta.

The typical vitiligo macule has a chalk or milky white colour, is round to oval in shape has slightly brushed to fairly distinct often scalloped margins measures from several milimeters to many centimetres in diameters.

Case Report:

A 6 yrs. Old male child came to Ayurveda OPD at M.G.I.M.S. Sevagram with history of white macule patch (measure 4.5 cm x 3cm) over frontal bone since 8 months. Patch is milky white colour, is round to oval in shape. It has diagnosed as vitiligo. He has taken medicines from outside also. Now patient was willing to take Ayurvedic medicines.

Ayurvedic Treatment :

A. 1st three month treatment:

- Panchakarma – 'Raktamokshana therapy' (blood letting) with Jalokavcharana i.e. leech application done for 2 times with 1 month interval.
- Internal Medication –
 1. Bakuchi churna 125mg + Gulvel satva 125mg with honey twice in a day.
 2. Krimikuthar ras 125mg twice in a day.
 3. Swayambhuv guggul 125mg twice in a day.
- Local Application:
 1. Snuhi patra + Arka Patra + Karanja patra kalka + Gomutra (cow's urine) – lepa for local application once in a day.
 2. Bakuchi churna + Gomutra (cow's urine) – lepa for local application once in a day.

B. 2nd three month treatment:

- Panchakarma – 'Raktamokshana therapy' (blood letting) with Jalokavcharana i.e. leech application done for 2 times with 1 month interval.
- Internal Medication .
 1. Palash beej churna 125mg + Vidanga churna 125mg with honey twice in a day.
 2. Bakuchi churna +Haritaki + Amalaki - decoction 10ml twice in a day.
- Local Application:
 1. Snuhi patra + Arka Patra + Karanja patra+ Jati patra kalka + Gomutra (cow's urine) – lepa for local application.
 2. Shudha Hartala+ Bakuchi churna + Nimba patra swaras - lepa for local application.

Discussion:

Above photographs shows effect of described medication in 6 yrs old male child.

Effect of Raktamokshana:

Jalaukavcharana is more effective in abnormality of Rakta dhatu caused due to morbidity of pitta dosha. Bhrajaka pitta (type of

pitta) which maintain health, colour and complexion of the skin get vitiated and causes skin disease like shvitra. Due to Jalaukavcharana vitiated pitta get evacuated and helps to increase normal microcirculation.

Effect of local application:

The main content in combination of above medication is 'Bakuchi' i.e. *Psoralea corlifolia* linn. The seed and fruit contain psorealen. Psorealen has active principle for inducing pigmentation of the skin. They reduce pigmentation when applied on hypopigmented skin together with increased blood flow and melanin

1. Producing activity in the affected area. (Ref.)
2. Snuhi patra + Arka Patra + Karanja patra kalka + Gomutra (cow's urine)

Effect of Internal medication :

1. Internal medication is given to normalize raktadusti.
2. Krimighna chikitsa is given to evacuate krimi as it is causative factor for skin disorder.

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Awareness about Information Technology: A Necessity for Research in Ayurveda

Dr. Ashutosh kumar Pathak

Senior resident, Department of Rachana Sharir,
Faculty of Ayurveda, IMS, BHU

Dr. H. H. Awasthi

Associate Professor and Head, Department of Rachana Sharir,
Faculty of Ayurveda, IMS, BHU
Email :- hhawasthi@yahoo.in

Abstract

Ayurveda is an ancient medical system of India practiced over thousand of years. The concepts described in this science are still to be explained on scientific objective parameters, so an exhaustive research is needed in this field which is in progress in various institutions in form of post graduate, doctrate reasearch also in many government bodies like CCRAS, AYUSH, CSIR, etc. The research work in this field require reviews of many literatures requires times and energy which can be minimized by use of modern tool and techniques i.e. information technology which can prove as great help in this field.

Keywords :- Ayurveda, Information Technology.

Introduction

Ayurveda is a life science of Indian origin which covers all dimensions of human life concerned with its health i.e. mental, physical, social or spiritual as evident from the definition of health by Acharaya Sushruta¹ which is quite similar to the definition of health by WHO in present era.

This point can be taken as fact that the theories of Ayurveda has a deep insight which has scientific logic behind them but they are still to be understood and tested on modern parameters or more precisely we can say, it need proper objective parameters on which they can be demonstrated as the most concepts are on subjective parameters.

The research works of ayurveda initiate from the classical literature review and goes upto the clinical trials which is quite vast area to work in and is not possible by solitary effort to reveal the obscure concepts rather it requires teamwork with multidisciplinary approach as the theories of this science has root in philosophical ground which grows up and cover every aspects of human life i.e. mental, physical, social or spiritual.

Many work has been done and still good number of appreciable work are in progress but they all needed to be brought up on single platform, so that a budding researcher can appreciate till date progress in the field he/she want to approach and can also get knowledge about new techniques and tools which can be incorporated for the research work. What could be the possible solution to this need?

The answer is the information technology (IT), now question rises how? Let's have brief introduction of the IT.

Information technology is concerned with technology to treat

information. The term technology means making usage and knowledge of tools, machine, techniques, craft, systems of methods of organization in order to solve a problem or to perform a specific function while the term information can be defined as the exchange of data with one another. The acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a microelectronics based combination of computing and telecommunication is its main field².

In nutshell IT is the area of managing technology and spans a wide variety of areas that include computer software, information systems, computer hardware, programming language but are not limited to things such as processes, and data constructs. In short, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the IT domain³.

Incorporation of IT like use of internet, various softwares, etc to the research work leads to convenient and speedy method which saves both times and energy for further research work even CCIM laid emphasis on awareness and making research scholar familiar to this technique – “The students shall have to acquire the knowledge about the methods and techniques of research in respective fields making use of Information Technology.”

The ways IT has been proved helpful to Ayurveda can be understood by some examples below –

1. Databases are now available like –

- www.dharaonline.org – digital helpline for Ayurveda research articles. It is an online index of articles on Ayurveda published in research journals worldwide.

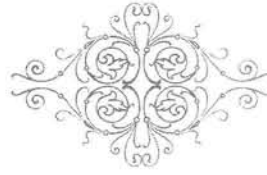
- ayushportal.ap.nic.in – it is an evidence based research data of AYUSH system at global level.
- 2. e-book of samhitas are available online and also on cd to be installed on system at
<http://ayush-icdss.com/esushruta/>
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- 3. Ayurvedic research database - Softcopy of all MD research work is made available by Jamnagar, NIA, Ahmedabad.
- 4. Pdf format of many classical books are available at -
<http://is1.mum.edu/vedicreserve>
- 5. <http://www.ccras.nic.in> – online portal for all CCRAS activity
- 6. SPSS – A statistical software had made obtaining and analysis of statistical data quite easily.

These are just glimpse , long way is still to come as incorporation of latest tools and technology in Ayurvedic research and its awareness among the research scholar will certainly going to prove a boon to this field.

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http://en.wikipedia.org/wiki/Information_technology



Gum Guggulu- A herb in Ayurveda

Meena S Deogade

Asso. Prof. Dept. of Dravyaguna
Mahatma Gandhi ayurved College Hospital & Research Centre,
Salod (H) (H), Wardha (Maharashtra)
Email :- drmeena@rediffmail.com

Abstract:

Guggulu this word denoting both, the plant as well as oleo-resin i.e. gum. Guggulu has been mentioned in Atharva-veda, samhita & Nighantu i.e. the ancient text of Ayurveda. Acharya Charaka and Vagbhata mentioned it as medohar & Vatahar. Acharya Sushruta describes the usefulness of this herb in the treatment of obesity. The part used as Guggulu is pale yellow or brown aromatic resin obtained from the bark. Acharya Sharangadhara recommended for the use of Puran Guggulu.

Key: Guggulu, Gum, Ayurveda, medohar, Puran Guggulu

Introduction

The plants have played major part in the pharmacotherapy during the vedic period. Vedic literature indicates mainly about the utility of single herbs in the management of diseases. Similar trend is also visible during early period. Which are called **Ekal dravya** chikitsa. One drug extremely useful in the diseases of vata and kapha doshas is Guggulu. Guggulu this word denoting both, the plant as well as oleo-resin i.e. gum. Guggulu has been mentioned in Atharva-veda, samhita & Nighantu i.e. the ancient text of Ayurveda. In Vedic literature it is mentioned that it having 'Agnisthan' and 'Mansavat'. It is aromatic and used in various ritual karma i.e. for Ashwamegh yagya abhyanga of Aswa has been done by Guggulu sathitghrut, it is used in Yagya, Dhoop, etc. In Atharva-veda it has been mentioned that the yakshma adi roga completely destroyed in area of aroma of Guggulu, that's why it is called as Rakshoghna. Acharya Charaka and Vagbhata mentioned it as medohar & Vatahar. Acharya Sushruta describes the usefulness of this herb in the treatment of obesity and other disorders of fat including coating and obstructions of vessels inhibiting atherosclerosis, that's why one synonym of that plant is 'Palankash' meaning of that is one which reduces flesh. It is mainly use for rheumatoid arthritis and lipid disorders. Scientists have conducted clinical trial to test the efficacy of this herb in lipid disorders & lowering weight. The research resulted in the development of natural cholesterol lowering substance that is safer and effective than many cholesterol lowering drugs.

The botanical name of this plant is *Commiphora mukul*, it belongs to Bursaraceae family. It is small tree or shrub with spine scent branches and colored rough bark, leaves are unifoliate, obovate, and alternate or crowded at the end of short branches, serrated in the upper parts, smooth and shining. Flowers are small sub sessile, brownish red, fruits ovoid drupes, acuminate, separating into two fleshy valves, leaving the nut enveloped by a four-cleft pulp, fruits are red when ripe. The part used as

Guggulu is pale yellow or brown aromatic resin obtained from the bark. Each plant produces 0.5-1 kg of oleo-resin.

Ayurvedic properties:

Rasa (taste) – Tikta(bitter), Katu(pungent), Madhur(Sweet), Kashaya(astringent)

Veerya (potency) – Ushna

Vipak (post digestion) – Katu

Prabhava (special effect) – Tridosahar

Bhavaprakash has mentioned five types of Guggulu.

1. Mahishaksha – Black colored, used for human
2. Mahanil – Blue colored used for elephants
3. Kumud – White
4. Padma – Brown used for horses
5. Kanak – Yellow, used for animals

Kaiyadeva nighantu also quoted that Guggulu trees habited in the jangala desa or vata desa will yield five types of gum –resin during grishma as well as in shitarutu.

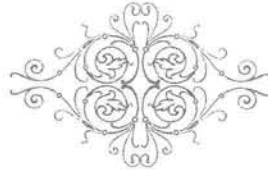
It is aromatic, anti inflammatory, thermogenic, expectorant, nervine tonic, aphrodisiac, liver tonic, digestive, emmenagogue, haematinic, rejuvenating, antiseptic, it is also use in vitiated condition of doshas i.e. paralysis, sciatica, gout, asthma, bronchitis, cardiac, hepatic diseases, coronary thrombosis, urinary calculus, skin disorder. It increases hemoglobin and leucocytes count. It is mentioned in Atharva-veda that Yakshma (tuberculosis) & other diseases will not spread to the areas fumigated by Guggulu. Therefore one synonym of it is Deodhup because its fumes are used in holistic functions, One reason of that is it acts fungicidal or fungi static action against microbions. It is clear that it act against infected & airborne diseases. So that in the days of Swain-flue its use by people aggregated for fumigation of their house.

Acharya Sharangadhara recommended for the use of Puran Guggulu. In the ancient texts storage time for gum is mentioned as five years. So that Puran Guggulu means 5 years old. Old & new Guggulu has different properties, new is aphrodisiac & old is reduces weight. Consumption of one tula Guggulu is for rejuvenating purpose. It having healing property therefore with triphala it can be given orally in wound. In various kaphaj vyadhi it can be used with pippali, ghrut or honey. It should not be used in excess in pitta constitutions, pregnancy, debility, in children & old age.

This is one of natural healing Ayurveda's strongest purifying herb, Which is used for thousands of years to clear strotasas and helps to remove toxins from the body and improves joint health and flexibility.

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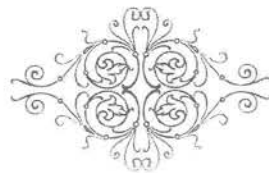
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